HELLER'S SECRETS OF MEAT CURING AND SAUSAGE MAKING

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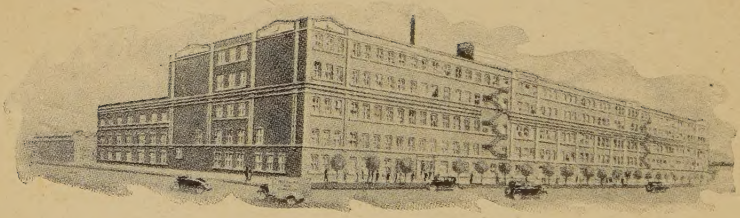

Main Plant and General Office
B. Heller & Company, Chicago, Ill.

HELLER'S

SECRETS OF MEAT CURING

and

SAUSAGE MAKING

A Complete Description of the Killing, Dressing and Chilling of all Meat Animals; the Various Cures; Smoking and Storage of all kinds of Meat—both with and without Packing House Equipment; Directions for making all kinds of Sausage, Meat Loaves and Relishes; Rendering; and Useful Information for Allied and Incidental Activities.

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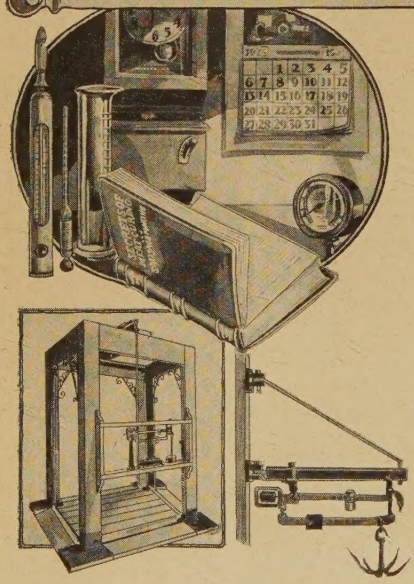
Standardize your Practices



There are three conditions often met with which may operate unsuspectedly to prevent success in the meat business—first, lack of correct information; second, lack of definite standards, formulas, and directions; and, as an outgrowth of the other two, lack of confidence. These are fundamentals, far more important than any other considerations in the complex organization of the modern meat business.

The butcher, packer or sausage maker must first master the principles which govern the economical use of his raw material. He must keep up with the progress of the industry, cull out from available information what is unsuited to his particular requirements, and resolutely change all former practices as far as the demands of the market and economy of product warrant it. He must know what to do, when to do it, and how to to it; but he must not lose sight of the boundary line between practical utility and extravagant ideas. This book supplies that information completely, simply, and reliably—information which has not before been published and which is protected by patents and copyrights for the users of our products.

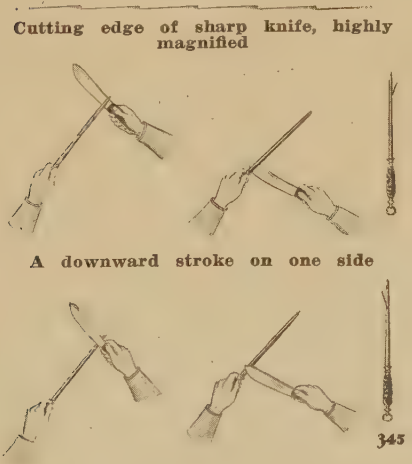
It is not enough to provide the right materials, proper equipment, and a general plan of organization. Those intrusted with the actual operations must have the practical knowledge to use materials and equipment efficiently or they must be carefully taught. The frequent spoiling of a lot of meat or meat products as a result of wrong methods is a not uncommon cause of business failure.

The curing cellar and the sausage room should turn out the same unvarying quality day after day and month after month; and hap-

hazard methods, as well as the lack of method, make that impossible. Each new worker, foreman or superintendent should co-operate to standardize the practices of packing, curing and sausage making, so that uniform results may always be obtained, and a profitable trade in the product built up. The methods and formulas given in this book have all been tested and approved; they are Standard and represent the best experience of the meat industry. They are now in actual use by firms that enjoy a worldwide reputation. They are given in such form that they can be used in all stages of business development, from the cross-roads country market to the largest packing house.

To insure uniform excellence of any meat product, this book should simply be adopted as the standard practice of the packing house. Having adopted it as your standard, see to it that a copy is accessible to every individual responsible for your products and suggest that he use it.

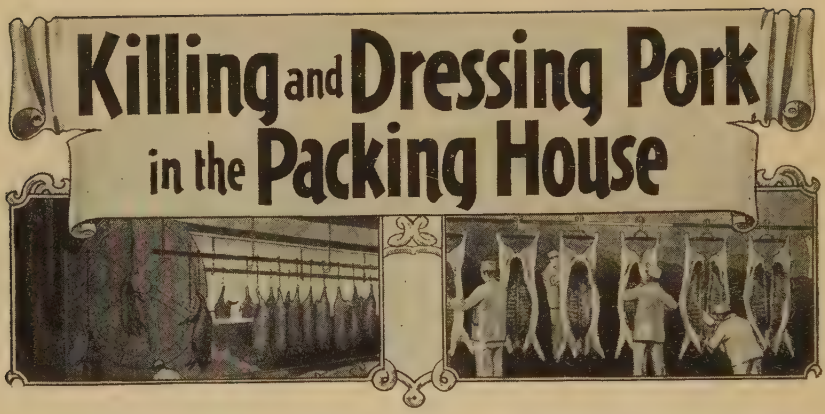
THE RIGHT WAY TO SHARPEN A KNIFE



Cutting edge of sharp knife, highly magnified

A downward stroke on one side

A downward stroke on the opposite side. Repeat till sharp.



Packing Pork the Year Around

Up to a comparatively few years ago all pork packing was done in the winter. Packing houses would fill their plants during the winter months, and in the spring would smoke out the meats. In this way, most of the meat had to be sold over-salted, the shrinkage and loss to the packer were great and meats, therefore, had to be sold at a much higher margin of profit; besides, they were of very inferior quality.

At the present time, due to improved methods, packing can be done all the year around, and meat can be sold as fast as it is finished. In this way cured meat can be produced at a much lower price, the money invested in it can be turned over many times a year, and the meat will be much better, taste better and more of it can be eaten because of the fact that it is more wholesome and more easily digested.

From Pen to Cooler

Begin Curing of Meat in the Pen

Thousands of pounds of ham, shoulders and sides are spoiled annually before the hog is killed. Overheated hogs or hogs that are excited from overdriving should never be killed until they are cooled off or have become perfectly quiet. When the temperature of a hog is above normal, the flesh always becomes feverish: this is especially true of large fat hogs.

The meat of feverish hogs can never be chilled as it should, and unless the meat is properly chilled it cannot be properly cured. As

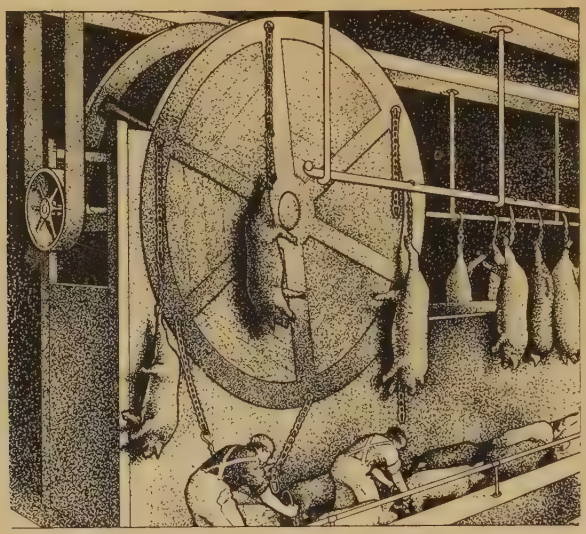
a rule it will sour. Before hogs are killed they ought to be driven into a cool place and, if necessary, sprayed with cold water until they are thoroughly cooled off. This precaution is necessary only in hot weather: in winter, they simply need plenty of rest. If it is necessary to hold hogs in the pen for several days before they are killed, they should have an abundance of water and also a little feed. This prevents shrinkage and will also keep them from getting nervous from hunger.

It is advisable to fast the hogs 12 to 24 hours before slaughtering. It reduces the animal heat and the meat tends to a better flavor. This also makes the intestines easier to clean and to handle. If kept on full feed the system is gorged and the blood, loaded with assimilated nutrients, is pumped to the extremities of the capillaries. It is then impossible to drain the blood thoroughly from the veins when the animal is bled, and the result will be a reddish-colored, unattractive carcass. Also, food in the stomach decomposes very rapidly after the animal is slaughtered. Where the dressing is slow, as it is in many cases, the gases generated in the stomach often flavor the meat. It is well to give water freely up to the time of slaughter as it aids in keeping the temperature normal and helps in cleaning out the system, resulting in a better color in the carcass.

Hoisting Hogs in a Large Packing House With a Hog-Hoisting Machine

Great care should always be exercised when hogs are hoisted before sticking. Often when a very heavy hog is jerked from the floor, the hip is dislocated or sprained, and blood clots form around the injured joint so that the ham is spoiled. The chain should always be attached to the hind foot nearer the wheel. Great care should also be exercised in driving the live hogs, as they are excessively heavy for their weak frames and, therefore, the easiest injured of all food animals. Slippery driveways and inclines should have cleats for a foothold.

Special pens should be provided for them where they are not crowded and where they have plenty of room when driven to the killing pen. Whips are responsible for many bruises. Use a canvas slapping strap instead. It may be 2½ to 3 inches wide, 2½ to 3 feet long, and urges effectively by the cracking noise it makes. The hogs should be handled very carefully, and piling up and crowding should be avoided as much as possible. Many hams are injured by over-



HOISTING HOGS ON THE WHEEL HOIST

crowding the hogs in the killing pens, for when hogs smell blood they become excited and nervous, and unless they have plenty of room they will pile upon each other so that there will be many skin-bruised hams and the flesh will have areas of inflammation and bruises.

Sticking Hogs in a Modern Packing House

Men sticking hogs should be sure to make a good, large opening in the neck, three or four inches long, in order to give the blood a good, free flow. It is very necessary to sever the veins and arteries in the neck so as to get all of the blood out of the hog. The man who does the sticking must be careful not to stick the knife into the shoulder, for if the shoulder is stuck, the blood settles there, and the bloody part will have to be trimmed out after the hog is cut up. In large packing houses there is a report made every day of the number of shoulder-stuck hogs, and the sticker must sign the report before it is sent to the office. This shows the sticker the kind of work he is doing and makes him more careful.

In small houses most butchers throw hogs and stick them while on the floor, letting them bleed there. Those who can possibly do so should hoist the hog by the hind leg, either before it is stuck or immediately after, so as to allow the hog to bleed properly. When the hog is properly hoisted by one hind leg, alive, and then stuck while

hanging, it will kick considerably and the kicking and jerking of the hog help in pumping out all the blood, making a much better bled carcass than if the hog is first stunned with a hammer and stuck on the floor. The better the hog is bled, the better the meat will be for curing.

STICKING AND BLEEDING

Scalding Hogs

It is impossible to give the exact temperature for scalding hogs, as this will vary with circumstances. In winter the hair sticks much tighter than in summer and requires more scalding and more heat than in summer.

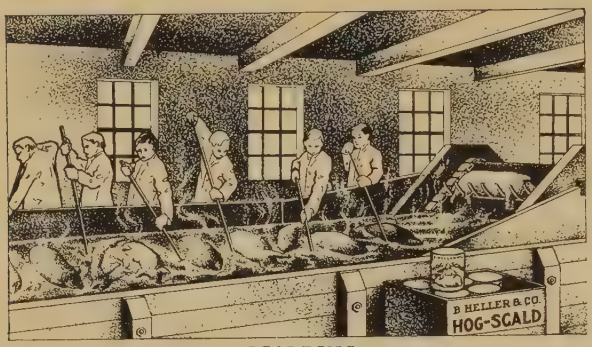
We suggest starting the scalding water at 147 to 150 degrees Fahrenheit; then it can be regulated according to conditions, and over-scalding the hogs will be avoided. If the water is too hot it will fasten the hair on the hogs and it will be difficult to remove.

Sometimes if one gets the water hot enough to clean the head and feet thoroughly, it will be too hot for the body of the hog. This will cause the body to become over-scalded and will fasten the hair on the hog. The head and feet take considerable more scalding than the body.

Hogs raised in the south, in a warm climate, will scald much easier than those raised in a northern climate. A butcher will soon learn which temperature is best adapted to his own locality and the kind of hogs he is scalding.

Scalding Hogs in a Large Modern Packing House

In a packing house where a long scalding vat is used, the temperature depends entirely upon how fast the hogs are being killed. If the



SCALDING

hogs are killed slowly, so that each hog can remain in the water longer, it is not necessary to have the water as hot as when they are handled fast and are taken out of the water in a shorter time. It is, however, universally acknowledged that the quicker a hog can be taken out of the scalding tub, the better it is for the meat.

The hog carcass is a ready conductor of heat, and when kept in the scalding water too long, it becomes considerably heated and bad results have many times been traced to the fact that the hog was scalded in water which was not hot enough, and was kept in this water too long in order to loosen the hair. Very often overheating the hog in the scalding water causes the meat of fat hogs to sour and packers wonder why it is that the meat has spoiled. We therefore caution packers against this, and advise the use of water as hot as practicable for scalding hogs.

To make the hair easy to remove and to remove dirt and impurities from the skin, we recommend Hog Scald. This preparation makes scalding easy, it removes most of the dirt and filth, cleanses the hog and whitens the skin.

In many localities where the water is hard, Hog Scald will be found of great value, as it softens the water and makes it nice to work with. It more than pays the cost by the labor it saves, as it assists in removing the hair and leaves the skin more yielding to the scraper.

There are many styles of hog scraping machines, with claims of perfection, used today by the large packers. But, with all these modern machines, the packers are compelled to use water softeners and cleansers in the scalding water, and in many of the more prominent packing houses Hog Scald is considered indispensable.

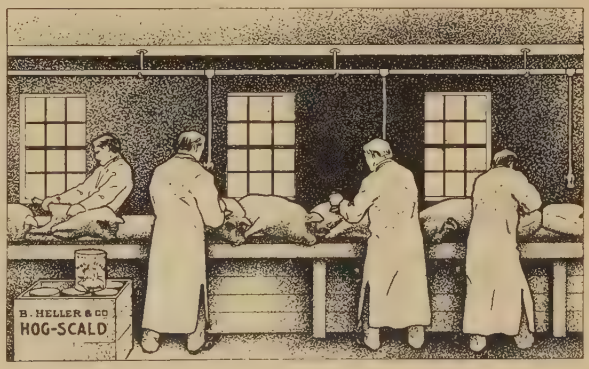
The skin of all hogs is covered with more or less greasy filth, which contains millions of disease germs and these extend down into the

pores of the skin. If this germ-laden filth is not removed, and if it gets into the brine when the meat is being cured, it injures both the meat and the brine in flavor, and also spoils the flavor of the lard if it gets into that. Hog Scald removes most of this filth and cleanses the skin, and for these reasons alone should be used by every packer and butcher. Hams and bacon from hogs that have been scalded with Hog Scald are cleaner and will be much brighter and more appetizing after they are smoked than those which retain the filth of the pens in the pores of the skin.

The use of Hog Scald is legal everywhere. It does not come under the regulations of the food laws, as it is simply a cleansing agent. Hog Scald costs very little and everyone can afford to use it. Butchers who once try it continue its use.

Scraping Hogs

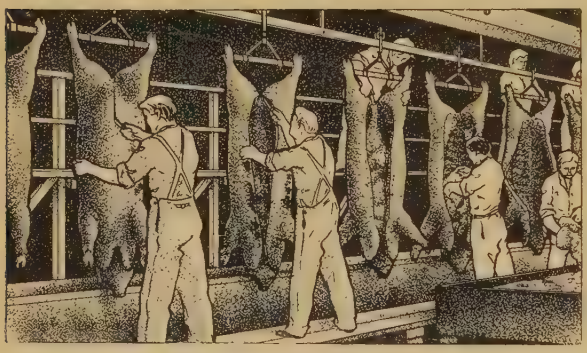
As much of the hair as possible should be scraped from the hogs instead of being shaved off with a sharp knife, as is often done. If the hog is not properly scalded and scraped and the hair remains in the skin, such hair is usually shaved off with a knife before the hog is gutted, and sometimes after the meat is chilled and cut up. After the meat is cured, the rind shrinks, the stubs of hair that have been shaved off stand out, and the rind is like the face of a man who has not been shaved for a day or so. The hams and bacon of such hogs look rough and unsightly. Therefore, packers should give close attention that the scalding and scraping are properly done. The scraping bench should be provided with a hose over the place where the hogs are scraped and this should be supplied with hot water, if possible, that the hogs may be rinsed off occasionally with hot water while being scraped.



SCRAPING AFTER THE SCRAPING MACHINE

Gutting Hogs in a Modern Packing House

Most of the packers have installed washing baths for the hogs to pass through. After the gambrel stick has been placed in the hogs, they travel along the rails before reaching the man who guts them. Then they pass through two compartments—first through hot water and then through cold water. These compartments are made of wood about six inches from the floor upwards, wide enough for the hogs to pass through. There are canvasses at each end with a slit in the canvas to allow the hogs to pass through. On the inside, the top and the sides contain jets or sprays, through which the water is forced over the hogs. The wooden sides and canvas ends prevent the water from splashing on the outside. After the hogs have passed through these two showers, they are clean and the gutter can do his work without contaminating the inside of the hogs. But it is necessary to use Heller's Hog Scald in the scalding vat to produce thoroughly cleaned hogs. It tends also to prevent souring of the hams through impurities entering at the cut for the gambrel stick.

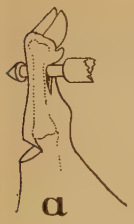


OPENING AND GUTTING

Where such washing baths are not used, hot water can be thrown over the hogs with a bucket. After the hog has been gambrelled and hung up, either on a gambrel-stick or on rollers, it should be gutted. As gutting is fully described on page 24, it is not necessary to go into details. After it is gutted, it should be washed out thoroughly, with plenty of cold fresh water.

Cutting the Hind Shank Bone

We advise the cutting of the hind shank bone after the hog is dressed, so as to expose the marrow, as shown in cut "b." It is the best thing to do, as it helps to chill the marrow. The chunk of meat that is usually left on the hind foot, above and next to the knee, if



cut loose around the knee, will be drawn to the ham, and when chilled, will remain on the ham instead of being on the hind foot, as shown in cut "a." After the meat is cut, the bone can be sawed, in the same place where the hock would be cut from the ham later (see cut "b"). The hog will hang on the sinews the same as if the bone had not been sawed, except that the cut bone separates and exposes the marrow so that it can be properly cooled. On heavy hogs this is quite a gain, as the chunk that would remain on the foot would be of little or no value there, but when left on the ham, sells at regular ham prices.

Facing Hams and Pulling Leaf Lard in a Modern Packing House

The first two figures in the accompanying cut show two men facing hams. The first man faces the ham at his right hand side and the second man faces that at his left, as the hogs pass by.

When facing hams, instead of cutting the facing trimmings off completely and allowing them to go into the tank for prime steam lard, allow them to hang on a small piece of rind or skin at the rump end. Throw them over between the legs, allowing the facing to hang down toward the back. Then they are chilled with the hogs, and when the hogs are cut, these ham facings go in with the ham trimmings and can be used in sausages. If not used for sausages they can be used for open kettle rendered lard.

FACING HAMS AND PULLING LEAF LARD

The advantage of facing hams right after the hogs are dressed is this: The knife can be drawn under the skin and under the fat close to the meat, and the fat will peel right off the fleshy part of

the ham. Between the fat and lean meat of the ham, between the legs, there is a fibrous membrane which is very soft and pliable. When the knife is slashed under the skin and fat, it will pass along the side of this membrane, making a clean face for the ham. That part remaining on the ham will shrink to the ham and will form a smooth coating over the lean meat, closing the pores and making the ham look smooth when cured. If the hams are trimmed after the meat is chilled, they look rough and ragged. Facing hams also allows the escape of the animal heat more readily. If hams are not faced until after the hogs have been chilled, the fat must be trimmed off and the hams will not look nearly as smooth as they would if this tissue and fat were removed while the hog is warm.

The second two men in the illustration are pulling leaf lard. The leaf lard should always be pulled out of hogs in summer, as it gives the hogs, as well as the leaf lard, a better chance to chill. During the winter months it may be pulled loose, but can be left hanging loosely in the hog, from the top. In this way it will cool nicely, and it will also allow the animal heat to get out of the hog.

Most of the large packing houses pull out the leaf lard in the winter, as well as summer, and hang it on hooks in the chill room to chill. We recommend this practice for various reasons. If one leaves the leaf lard on the hogs to chill and the hogs hang in the cooler forty-eight hours, the leaf lard is tied up for the same period.

Pulling it warm and placing it on hook racks, upright with the skin outside, cools it off quicker and it is in better shape and condition to ship. Twelve hours' chill is enough for open kettle lard and neutral. There is a big demand for neutral among the oleomargarine manufacturers, and it is essential to pull the leaf lard warm for that class of trade.

Leaf lard that is properly chilled, with the animal heat all taken out of it, makes much finer lard than when pulled out of the hog and put into the rendering tank without proper chilling.

Splitting Hogs in a Modern Packing House

Splitting can be done in several different ways. Where the back of the hog is to be cut up for pork loins, the hog is simply split through the center of the backbone, so that one-half of the backbone remains on either loin. Packers who wish to cut the sides into short or long clears or clear bacon backs, slash down on both sides of the backbone, as close to the backbone as possible, cutting through the skin, fat and lean meat; then the hog should be split down on one

SPLITTING

side of the backbone. The backbone should remain on the one side until the hog is cut up and it can then easily be sawed off with a small saw. By cutting or scoring the back in this way for making boneless side meat, the sides are made smooth and there will not be as much waste left on the bone as when the backbone is split, half of it left on either side, and then peeled out after the meat is chilled and is being cut up.

Hog Chill Room in a Modern Packing House

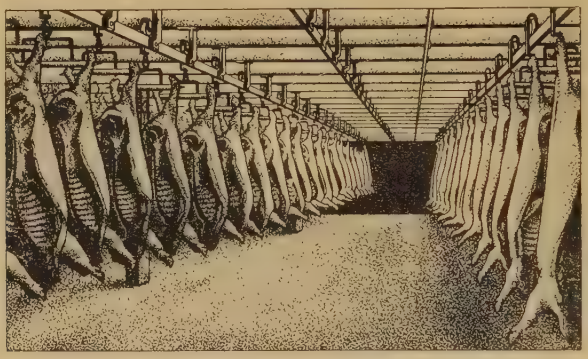
When the animal is killed, the germs of decay rapidly increase in the muscle fibres, if left at body temperature, gradually breaking down the tissues and producing a gas which gives the meat a characteristic sour or spoiled odor. The growth of those germs is checked in curing brine and the germs are entirely killed by full strength or 100-degree brine. However, meat put into cure while still soft will come out of cure soft and not firm.

Fortunately, a temperature near freezing checks the growth of the germs. It is important, therefore, to chill the meat through as quickly as possible while it is slowly becoming firm enough to go into cure. This is done by hanging the carcasses in chill rooms.

Hams are the thickest part of a meat carcass. They therefore take the longest to remove the animal heat from the bone or innermost part. The heat in the shank bone and around the stifle joint provides a temperature at which the germs multiply rapidly and "souring" may set in before the ham is cooled through to the marrow. Such a ham is spoiled. The odor of spoiled meat cannot be removed by lawful means and at least part of that ham will be fit only for tankage.

The remedy is in a two-fold prevention: first, bring the temperature of the innermost parts of the meat down almost to freezing point before the germs of putrefaction have a chance to multiply to

the danger point; second, when going into the higher temperature of the curing cellar (38 to 40 degrees F.), promptly pump full-strength pumping brine into the thick, lean parts to prevent "bone sour" there before the curing agents can penetrate from without.



HOG CHILL ROOM

Many chill rooms are not properly built. There should be lots of space between the ceiling of the chilling room and the gambrel stick so that the shanks, too, may become thoroughly chilled. The animal heat which leaves the carcass naturally rises to the top of the cooler where the temperature will become quite warm, unless there is sufficient space between the ceiling and the top of the hog. This will prevent the marrow in the shank and the joints from becoming properly chilled. It is this lack of sufficient space above the gambrel stick that accounts for so much marrow and shank sour in hams.

Temperature of Chill Room

All packers who have a properly built cooler for chilling hogs and who are properly equipped with an ice machine will find that the following rules will give the best results. Those who are not properly equipped should try to follow these rules as closely as they can with their equipment.

A hog chill room should have a temperature of 28 to 32 degrees F. when the hogs are run into it. As the cooler is filled the temperature will be raised to as high as 45 or 46 degrees, but enough refrigeration must be kept on to bring it down to 36 degrees by the end of 12 hours after the cooler is filled; then the temperature must be gradually reduced, and at the end of 48 hours the cooler must be down to 32 degrees.

All large hog coolers should be partitioned off lengthwise, at each line of posts, making long alleys to run the carcasses into, so that the temperature of each alley can be separately regulated.

In the improper chilling of the carcasses lies the greatest danger of spoiling the meat. The utmost care must be given to the proper chilling, for if the carcasses are not properly chilled, it will be very difficult to cure the meat, and it will be liable to sour in the curing. Meat from improperly chilled carcasses, even with the greatest care afterwards, will not cure properly. Therefore, one of the first places to look for trouble when hams are coming out sour is the chilling of the meat, as nine chances out of ten this is where the trouble started. We have found by experience that by deviating only a few degrees from these set rules, the percentage of sour meat is surprisingly increased.

It has always been considered an absolute necessity to have an open air hanging room to allow the hogs to cool off in the open air before they are run into the cooler. It has been assured that this saves considerable money in the refrigeration of the hogs. However, by the experiments made in some of the large packing houses, it has been demonstrated that this economy is very much over-estimated. There are certain conditions which must be closely adhered to for the safe handling and curing of pork products, and the most important of these is the proper temperature. In the outside atmosphere the proper temperature rarely prevails, and only in the extreme northern states. Hogs that are left in the open air on the hanging floor overnight are generally either insufficiently chilled or are over-chilled the next morning, depending upon the outside temperature of the air. We feel that it is of advantage, however, to run the hogs into an outside hanging room and to allow them to cool and dry for two to six hours before putting them into the chilling room, provided the weather permits and the temperature of the air is cold enough to favor rapid cooling.

Packers who cure large quantities of pork must see to it that their chill rooms are properly constructed and have sufficient refrigeration so that the temperature can be kept under perfect control in separated alleys at all times. The hogs can be run into one of these alleys as fast as they are killed, and should the temperature get up above 50 degrees the hogs can be run out of this into another. The cooler in which the hogs are chilled should never go above 50 degrees, and a properly constructed cooler can be kept below this temperature.

While the cooler is being filled, the temperature should be held at between 45 and 50 degrees, and should be kept at this for about two hours after filling. At the end of two hours all of the vapor will have passed away, being taken up by and frozen on the refrigerator pipes, and the hogs will begin to dry. When the hogs begin to show signs of drying, or in about two hours after the refrigerator

is filled, more refrigeration should be turned on, and the temperature should be gradually brought down, so that in twelve hours from the time the cooler is filled the temperature should be down to 36 or 37 degrees. If the temperature is not brought down to near 32 degrees in twelve hours, it means a delay in removing the animal heat, and a consequent tendency for decomposition to set in.

To reduce the temperature of the carcasses more rapidly than that is not economical, even though it is possible to chill in one-half or even one-fourth the time here scheduled.

The first twelve hours of the chilling of all kinds of meat and the removal of the animal heat during the period is the most important part of the chilling. After that period, the proper temperature is of much less vital importance.

Hogs that are to be cut up for curing should never be cut up sooner than 48 hours after being killed, if the above temperature schedule is followed; and the temperature of the cooler should be gradually brought down to 28 degrees F. by the time the hogs are taken out of the chill room to be cut up. After the hogs have been in the cooler 12 hours the temperature should be at 36 degrees and should then be gradually brought down to 28 degrees at the end of 48 hours: that is, if the hogs are to be cut up in 48 hours after they are killed. If they are to be cut up 72 hours after being killed, the temperature should be brought down gradually from 36 degrees at the end of the first 12 hours, to 30 degrees at the end of 72 hours. This would mean that the temperature should be brought down from 36 degrees to 30 degrees if the hogs are to be cut up at the end of 72 hours, a lowering of six degrees in practically 60 hours; or it should be brought down eight degrees, from 36 to 28 F., if the hogs are to be cut up 48 hours after being killed. This means a reduction in temperature of about one degree for every eight hours. It does not mean that the six or eight degrees should be reduced in two hours. If that were done the meat would be frozen.

In a large packing house, where the cooler is properly equipped, and one has a good attendant, these instructions can be carefully carried out in detail and the safe curing of the product will be assured.

While the curing, of course, requires careful attention, yet, if the chilling is not done properly, the curing will never be perfect.

The floors of coolers should always be kept sprinkled with clean sawdust, as this absorbs drippings and assists in keeping the cooler clean and sweet. If the drippings from hogs are allowed to fall on the bare floor, the cooler will soon become sour and this will affect the meat hanging there.

Killing and Dressing Hogs without Packing-House Equipment

Very often butchers in the smaller towns find it convenient to slaughter livestock in the country where it is purchased. In order to meet such cases we submit directions herein for slaughtering cattle, hogs and sheep, and no doubt they will be found useful and suggestive.

It is absolutely necessary that only healthy animals be slaughtered for food. It is not so important that stock be fat, although no one can expect the best results from lean animals, but as there is a demand for all grades of meat, the market class is not as important as the health of the animal.

TOOLS NECESSARY FOR HOG BUTCHERING

In the case of injured animals with crushed ribs, broken limbs, etc., the flesh is not good for food unless the stock is slaughtered immediately after receiving the injuries.

A good sticking knife, hog hook, scrapers, a barrel or a trough large enough for immersing the hog and a convenient place for working are important necessities. Set the barrel securely at the proper slant, with the open end against a table or platform of convenient height. A 2x4 or other block under either side of the barrel and parallel with it prevents rolling and shifting of the barrel. The hog can then be doused by one or two men. Otherwise the barrel of hot water can be placed under the tackle shown in the illustration. Hogs should not be excited or heated and in catching and throwing them bruising must be avoided. It is not necessary to stun hogs before sticking them. At slaughtering houses they are usually hung up by one hind leg. When there are no hoisting appliances, lay the hog on its back and hold it there until stuck. Two men can handle a hog. By reaching under the animal, one at the opposite foreleg

and the other at the opposite hind leg, they can easily turn a heavy hog on its back. One, standing astride the body, with his feet close against the sides, holding its front feet in his hands, controls it while the other does the sticking.

A ONE-MAN METHOD

The knife should be 8 inches long, with straight, narrow blade, and stuck into the hog's throat just in front of the breast bone, the point directed toward the root of the tail and held in line with the backbone. This is necessary to prevent cutting between the ribs and the shoulder, which would cause the blood to settle there with waste in trimming of the shoulder. When the knife has been stuck in 6 or 8 inches, according to the size of the hog, turn the knife quickly to one side and withdraw it. The arteries that are to be cut run close together just inside of the breast bone and both are cut when the knife is turned, providing the edges are sharp at the point.

HOLDING AND STICKING HOG; 1ST POSITION

HOLDING AND STICKING HOG; 2ND POSITION

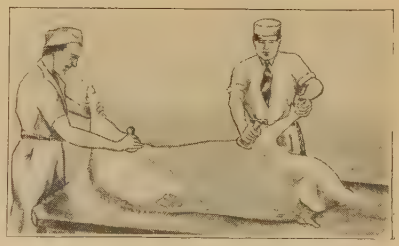
The water for scalding should be heated to the boiling point when removed from the stove. If put into a cold barrel, it will be about the right temperature when the hog is ready for scalding. During the scalding process the water should be about 185 to 195 degrees, if the scalding tub holds only enough water to scald one hog. Water at 150 degrees will scald a hog, but, of course, more time is required. In large packing houses where a large tub is used and steam is continually blowing into the water, the water is kept at 150 degrees. Too hot water is likely to cause more trouble than too cold, and for this reason it is always best to have a thermometer at hand. Of course, the temperature may be reduced by putting in a little cold water. A hog should not be scalded before it is dead, or the blood in the small

blood vessels near the surface of the skin will cook and give a reddish tinge to the carcass.

SCALDING HIND END EXPOSING HAM-SINEW FOR GAM-BREL STICK SCALDING FORE END

The illustrations show the best method of scalding where two men are available. If the butcher works alone, he may use the block-and-tackle arrangement shown on page 22, or a boom may be erected to swivel on a stout post. A hook to hang the gambrel on is screwed into the short end of the boom. A rope at the long end enables him to raise and lower the boom by dipping the hog into the scalding barrel at the opposite end.

To make the hair easy to remove, to cleanse the skin of the hog and free it from all the greasy filth which forms a scurf on the skin, our Hog-Scald should always be used. Hogs scalded with the aid of Hog-Scald do not require so much heat to loosen the hair and it requires much less labor to clean them. It also tends to prevent souring of the hams through impurities entering at the cut for the gambrel stick.



SCRAPING: ATTEND TO THE FEET AND HEAD FIRST

The hind shank bone may then be cut as shown on page 15.

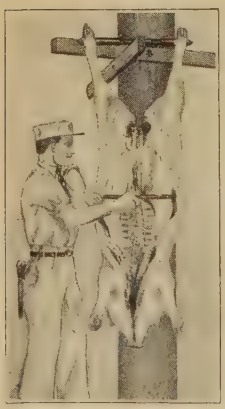
Gutting Hogs

Split the hog between the hind legs, separating the bones with a knife. Run the knife down over the belly line, guiding it with the

OPENING THE CARCASS

right hand and shielding the point with the finger of the left hand, and thus avoid the danger of cutting the intestines. Split the breastbone with a knife or an ax and cut down through the sticking place to the chin. Cut around the rectum and pull down until the kidneys are reached, using a knife whenever necessary to sever the cords attached to the back. Do not disturb the kidneys or the fat covering them, excepting in warm weather, when the leaf may be removed to allow quicker and more thorough cooling. Remove the paunch and intestines. The gall bladder lies in plain sight on the liver, and it lies attached to the diaphragm and hypatic vein. It should be stripped off after starting the upper end with a knife. Avoid spilling the contents on the meat. Insert the fingers under the liver and strip it out. Cut across the artery running down the backbone, and cut around the diaphragm, removing them with the pluck—that is, the heart, lungs, liver and gullet. Open the jaw and insert a small block to allow free drainage. Wash out all blood with cold water, and dry with a coarse cloth. In hot weather the backbone should be split to facilitate cooling. The fat should be removed from the intestines before they get cold. It is strong in flavor and should not be mixed with the leaf lard in rendering.

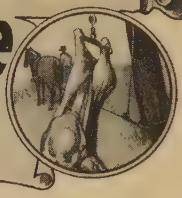
LOOSENING THE BUNG



HANGING THE CARCASS TO COOL

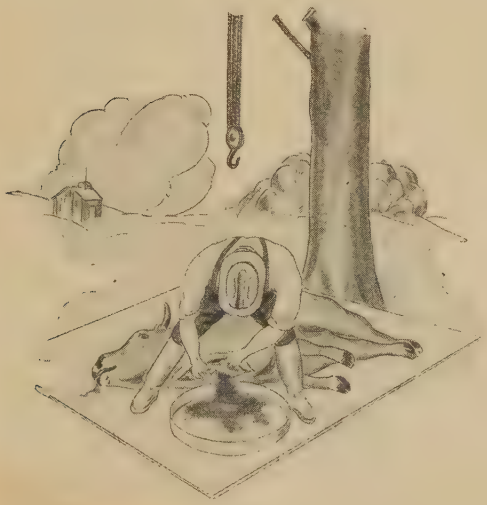
Then hang the carcass in a cooler at 32 to 40 degrees F., or at least in a cool cellar or outhouse, clean and free of flies, odorous paint, tar, kerosene, gasoline, and other strong odors. Get the animal heat out of it as quickly as possible without letting the meat freeze.

Killing and Dressing Beef without Packing-House Equipment



The first step in killing is to secure the animal so that it cannot escape. Use a rope one inch in diameter. Put a slip noose in one end with a knot just far enough from the noose to prevent choking when drawn tight to forestall escape by the slackening of the rope. If the animal has horns, pass the noose over the head, back of the ear and horn on the right side, but in front of the horn on the left side of the head. This position leaves the forehead of the animal bare and does not tighten on the throat. When a dehorned or polled animal is to be slaughtered it will be necessary to put the noose around the neck. Attach an ordinary pulley to a post or tree close to the ground, to the barn floor or sill, and draw the rope through it and down as close to the pulley as possible.

PREPARING FOR "KNOCKING"

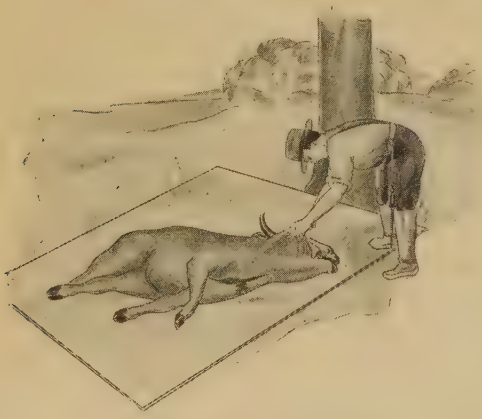


CORRECT POSITION IN "STICKING"

Administer a heavy blow in the center of the forehead at a point where lines from the base of the horns to the eyes should cross. Shooting has the same effect as stunning and may be resorted to. Frequently where an animal cannot be brought to the pulley it is necessary to shoot it. In shooting use only a rifle of large calibre.

Bleed the animal immediately by sticking just in front of the breastbone as

shown in the adjoining illustration. Stand in front of the animal with back toward the body after the manner of a horseshoer. Reaching down between the front feet, lay open the skin from breastbone toward the chin for a distance of 10 to 12 inches, using the ordinary skinning knife. Insert the knife with the back against the breastbone and the tip pointing to the spinal column at the top of the shoulders, cutting just under the windpipe and about 5 to 6 inches in depth at the junction of the jugular vein near the collar bone. At this point, if the vein is severed, the blood will run out rapidly. If stuck too deeply, the pleura will be punctured and blood will flow in the chest cavity, causing a bloody carcass. It requires practice to become expert in the sticking of beef. Not so much skill is required simply to cut the animal's throat back of the jaws but the time required for bleeding is very much longer and the bleeding less thorough.

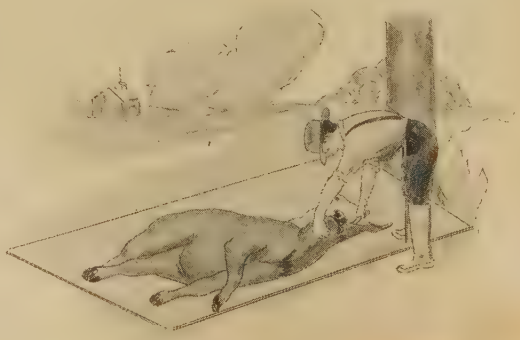


SKINNING THE FACE

Incomplete bleeding results in a "fiery" carcass, the surface being spotted with highly colored blood vessels. The meat of incompletely bled cattle decomposes more rapidly.

Skinning and Gutting

Begin skinning at once, while the carcass is lying on its side, by splitting the skin through the face from the poll, through the left eye to the nose, as shown in the above illustration. Skin the face back over the eyes on both sides and down over the cheeks, cutting around the base of the horns so as to

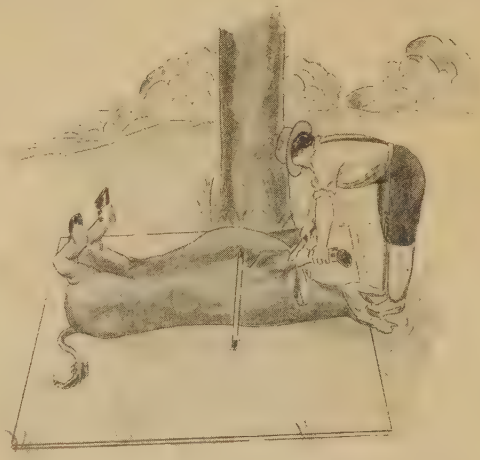


SKINNING THE HEAD

REMOVING THE SKINNED HEAD

leave the ears on the side. Split the skin down the throat to meet the cut made in bleeding. Start the skinning slightly on the sides of the neck and down to the jaws. Now remove the head by cutting just back of the jaws toward the depression back of the head as shown in adjoining illustration. The atlas joint will be found at this point and may be easily unjointed with the knife.

At this point the carcass should be rolled on its back and held in position by a pritch or small, strong stick, say 22 inches long, with a sharp point on both ends. Insert one end in the floor or ground. This will hold the carcass in position. Then split the skin over the back of the forelegs, from between the dew-claws to a



SKINNING AND DISJOINTING FORE SHANK

point about 3 inches above the knees. Skin around the shin and knee, disjointing the knee at the lowest joint, as seen in the above illustration, and skin clear down to the hoof.

The brisket and forearms should not be skinned until after the carcass is hung up. Now cut across the cord of the hind leg at the joint below

SKINNING AND DISJOINTING HIND SHANK

the hock. Split the skin from the dew-claws to the hock and up over the rear part of thigh to a point from 4 to 6 inches back of the cod or udder. Skin the hock and shin, removing the shank as shown on the preceding page. In splitting skin over the thigh, insert the knife flat with the edge upward to avoid the cutting of flesh. While the hind leg is stretched forward, skin down over the rear of the lower thigh until the hind-

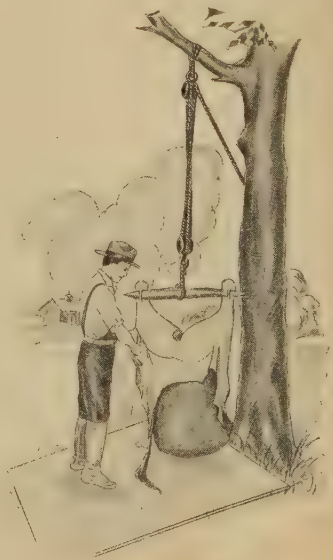
"SIDING" THE CARCASS

quarters are raised. After the legs are skinned split the skin of the carcass over the midline from the breast to rectum.

Now begin at the flanks and skin along the midline until the side is nicely started. With a sharp knife

READY TO BE RAISED

held flat against the surface, have the hide stretched tightly and remove the skin down over the sides with steady down-strokes of the knife, as shown in the upper illustration; but the hide should be stretched tightly and without wrinkle. It is necessary that care be taken to leave a covering of muscles over the abdomen of the carcass as it keeps it better. In siding the beef it is usual to go down nearly to the backbone, leaving skin at-



HALF RAISED FOR SKINNING

tached at thighs and shoulders. Skin over the buttock and as far down on the rump as possible, always avoiding cutting the flesh or tearing the membrane over it. A coarse cloth and a pail of hot water should be at hand while skinning, and blood spots should be wiped quickly from the surface, but the cloth should be nearly dry, as the less water used the better.

Open the carcass at the belly and pull the small intestines out at one side. Use a saw or sharp ax in opening the brisket and pelvis. After raising the windpipe and gullet and cutting loose the pleura and diaphragm along the lower part of the cavity, the carcass will be ready to be raised.

When the carcass is raised to a convenient height, skin the hide over the thigh, rump and hips. While in this position, it is well to loosen the rectum and small intestines and allow them to drop down over the paunch. The fat lining, the pelvis and the kidney fat should not be disturbed nor mutilated. The intestines may be separated, by the use of a knife, from the liver, to which they are attached. The paunch is attached to the back at the left side and may be torn loose. Let it roll on the ground and cut off or draw off the gullet. The carcass at this point is shown at the left, below. Now take out the liver, having first removed the gall bladder. Now remove the diaphragm, lungs and heart and finish skinning over the shoulders, forearms and neck, as shown in the middle below. Wash all the dirt and blood off with a cloth, split the carcass in halves, using a saw, cleaver or sharp ax, wash out inside of the chest cavity and wipe it dry.

Trim off all bloody veins and scraggy pieces of the neck and leave the beef to cool before quartering.

REMOVING OFFAL AND PLUCK

SKINNING DOWN THE BACK

TRIMMING OFF RAGGED EDGES

Killing and Dressing Sheep without Packing-House Equipment

If the sheep is an old one it should be stunned. If a young one, dislocating the neck after cutting the throat serves the same purpose. This is accomplished by placing one hand on the top of the head, the other under the chin, and twisting sharply upward. Lay the sheep on its side on a platform or in a V-shaped trough, with its head over the end, the back of the neck against your knee or thigh. Grasp the chin in the left hand and stick the knife through the neck back of the jaw, turning the cutting edge of the knife outward (from you) toward spinal column and cut the flesh to the bone. By so doing it is impossible to cut the windpipe.

Split the skin over the back of the front leg from the dew-claws a little above the knee. Open the skin over the windpipe from breast to chin, starting in slightly to one side of the neck. Split the skin over the back of the hind leg through the middle line and skin the buttock. Raise the skin over the udder or cod and flanks. Skin around the hocks and down to the hoofs, cutting off the feet at the toe joints. Run the knife between the cord and bone on back of the chin and tie the legs together just above the pastern joint. Do not skin the legs above the hock until the carcass is hung up.

FISTING OFF THE PELT

Hang the sheep up by the hind legs, split the skin over the middle line; start at the brisket and "fist off" the skin. This is done by grasping the edge of the pelt firmly in one hand, pulling it up tightly, and working the other with the fist closed between the pelt and the body, over the forequarters downward and upward and backwards over the hindquarters and legs. It is unwise to work down on the skin over the hind legs, as it would

rupture the membrane. The wool should always be held away from the flesh as a matter of cleanliness, and the skin on the legs should be pulled away from the carcass rather than toward it. When the pelt has been loosened over sides and back, it should be stripped down over the neck and cut off close to the ears. Remove the head without skinning by cutting through the atlas joint.

Gutting

Remove the entrails by cutting around the rectum and allowing it to drop down inside, but do not split the pelvis. Open down the belly line from cod or udder to breast bone; take out the paunch and intestines, leaving the liver attached to the diaphragm. It is best not to split the breast. Reach up in the pelvis and pull out the bladder. Wipe all blood and dirt from the carcass with a coarse cloth wrung out in hot water. Double up the front legs and slip the little cord found by cutting into the fleshy part of the forearms over the ankle joints.

Yearlings

Yearlings are an intermediate class between sheep and lambs. They are readily distinguished by the so-called "break-joint."

In dressing mature sheep, the feet are taken off at the ankle joint, leaving a smooth, rounded surface. In the yearling, the foot is broken off, leaving the head of the shin-bone saw-toothed as in the middle specimen below. A mature sheep with the rounded ankle joint pinched off to resemble a "break-joint" (see right-hand specimen) lacks the white cartilage shown on the yearling specimen.

ROUND JOINT OF SHEEP | BREAK JOINT OF YEARLING | ROUND JOINT PINCHED OFF

Commercial Fattening

Much of the poultry received by poultry packers is in such unthrifty condition that it pays to feed the birds systematically before killing them for the market. Young stock can be put in prime condition in ten to fourteen days, and hens in six to eight days, yielding sufficient gain in weight and improvement in quality to pay a handsome profit. Commercial feeding usually begins about the time of the first culling of the young flocks, in June, and lasts until the final culling for the new laying season in January.

Provide clean coops, with wire bottom and a movable tray or pan under each for the droppings, and spray them with Heller's Sanitary Fluid to disinfect and deodorize them and to kill the lice. Our Ozo Washing Powder, when used, makes cleaning easy.

BATTERIES OF FATTENING COOPS, ARRANGED CONVENIENTLY FOR FEEDING, CLEANING, AND INSPECTION

When the coops are dry, sort out the poultry according to age and size, and put from six to ten in each coop, according to size of coop and poultry. Have a feeding trough across the entire sides of each coop.

Under careful sorting, management and feeding, there may still be some deaths. Thorough sanitation, correct and regular feeding,

and removal of sickly and unthrifty individuals, will reduce these losses to a minimum.

The following formulas give the best proportions for mixing the grain most available in the local market. They make good fattening rations, usually the most suitable for economical feeding. Experience will show what is best in each locality under existing conditions.

Mixture No. 1
(For each 100 lbs. of feed)
60 lbs. cornmeal,
40 lbs. low-grade wheat flour.

Mixture No. 2
(For each 100 lbs. of feed)
58 lbs. cornmeal,
36 lbs. oat flour,
6 lbs. tallow or cracklings.

The proportion of corn should be higher during the winter months than in summer and autumn.

Milk should be used under all circumstances. It may be buttermilk or skim milk, sweet or sour. The proportion of milk to use depends on the quantity the grain will take up, and ranges between 55 and 70 per cent of the mixture. It should be sufficient to make the mash the consistency of cream: that is, so that it will drip from a spoon.

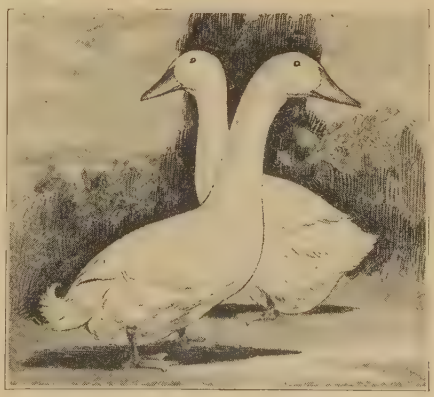
The mixing may be done by hand with a rake in a large pan. All lumps must be worked out. Thoroughly mix the dry ingredients first; then add the milk and continue working the mash until all is of even consistency.

Quantity to feed.—If the birds have a full crop when put into the coop, it is best not to feed them the first twenty-four hours. If they have been fed regularly but are hungry, it is best nevertheless to feed less at first than after the first day or two. Feed regularly at fixed intervals, not less than twice a day (say at 7:00 a.m. and 3:00 p.m.), and never give the birds more than they clean up completely before again feeding.

Grit must be fed twice a week at the rate of four pounds to the hundred birds, but only when they are held longer than ten days.

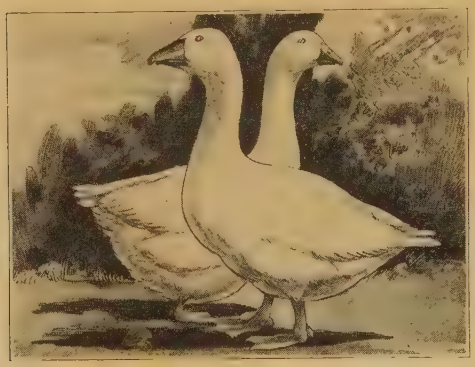
Greens, tallow, and tankage can be added to all kinds of feed with good results. Grind and add them to the other feed periodically, working them in thoroughly.

Ducks and ducklings.—Their rations may be the



PEKING DUCKS ECONOMICAL FOR FATTENING

same as those for chickens, except that they need more mash and a larger proportion of green feed, and it is well to add the greens to the regular rations even during short feeding periods.



EMBDEN GEESE, THE BEST FOR ECONOMICAL MARKET FEEDING

Fattening geese. — Only fully feathered young geese are extensively used for this. In pens, feeding them corn from self feeders without limit and using oat straw for bedding, it takes from 3 to 5 weeks to fatten them for market. By cramming them, confining six or eight in a large coop or in a small pen, and hand-feeding them five times a day, the fattening time can be definitely completed within three weeks. The method is as follows: Mix two parts cornmeal, one part ground wheat and sifted ground oats, with enough low-grade flour to make a stiff batter when water is added. Put the mixture through a sausage stuffer with ¾-inch opening, cut it into 2-inch sections, roll them out in flour so they are pointed at both ends and cook them like dumplings. Feed them warm by hand or by means of a crammer worked with a pedal.

Fattening turkeys.—Turkeys do not fatten satisfactorily under confinement. They may feed very well for two or three days and then refuse food.

Killing and Dressing

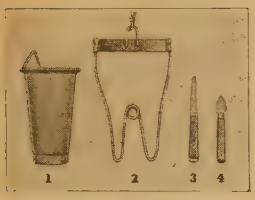
Market poultry should have no feed the last twenty-four hours before killing, but should have plenty of clean drinking water. They should have an empty crop when killed, as this gives them better keeping quality and improves their appearance. All market poultry is killed and dressed with head on, to identify it, and as evidence of good health.

The best method of killing poultry is illustrated on page 35. It drains the blood better than other methods; it is humane and makes picking easy.

"PADDLE" USED TO PREVENT TURKEYS FROM FLYING

Make a shackle of ⅛-inch galvanized wire and suspend it at such height that the wings of the bird will be level with the picker's elbows.

Holding the neck of the bird in the palm of the left hand, the thumb and fingers press against the hinges of the jaw-bone, forcing the mouth wide open. The bridge vein which joins the other two is nearest on the operator's left, immediately behind the hinge of the bird's jaw. This is the point where the veins should be cut, as shown in the accompanying illustration, in order that the bird may bleed fully. Incomplete bleeding causes rapid deterioration of the meat.



TOOLS FOR STICKING, DRY PICKING, AND PINNING

A knife with a pointed, narrow blade, ¼ inch wide, and a straight cutting edge, 2½ inches long, is large enough for bleeding any poultry up to the size of a turkey.

Unnecessary cutting and slashing, in an attempt to cut through the vein, should be avoided. A practiced hand will do it instantly, with a single incision.

Immediately after cutting the vein, before removing the knife from the mouth, stick the point of the blade into the groove in the roof of the mouth, shown in the illustration, and run it straight into the brain at the back of the skull. This renders the bird unconscious and causes it instantly to relax the tension on all feathers, so that they will be more easily plucked.

All market poultry except game fowl is picked. They may be dry-picked or scald-picked, depending on the demands of the market. Dry-picking requires more skill and does not cause the red spots which scalding can cause when the water is too hot or the birds are left in it more than momentarily. The so-called semi-scald method immerses the fowl 28 seconds in water held at 128 degrees F. But neither the scald nor the semi-scald method gives the carcass the ability to "stand up" under storage which it has when dry-picked.

WHERE TO STICK POULTRY

The neck is shown transparent to make the directions clearer.

The so-called semi-scald or wet-dry method rouses the fowl (head down) 30 seconds in water held at 125 degrees F. for springs and broilers, 130 degrees for mature birds. But neither scalding nor semi-scalding gives the keeping quality of dry-picking.

Begin dry-picking as soon after piercing the brain as possible, for the feathers set again and then become more difficult to pick than ever. The following steps, mechanically followed through with a minimum of lost motion, are known as "roughing". Always pull with the natural slant of the feathers: to pull "against the grain" may cause the skin to tear.

First.—As the fowl hangs from the shackle with back toward you, grasp both wings close to the shoulders in the left hand. Grasp the tail in the right hand, thumb down, turn the wrist and twist out the tail feathers with an upward turn of the fist.

1—PULLING THE TAIL FEATHERS

2—PULLING THE HEAVY WING FEATHERS NEXT

Second.—Keep same hold with left hand, grasp as many of the large wing feathers as possible in one grab of the right hand, thumb up. Jerk them out with a sharp, quick, downward pull—one grab for a small bird, two for a large.

Third.—The first picking of the body feathers begins at the breast and sides, and under no circumstances on the neck. Begin at the wishbone. Take large handfuls. Seize the feathers with the whole fist of the right hand, thumb upward. Pull up and outward, twisting the forearm outward.

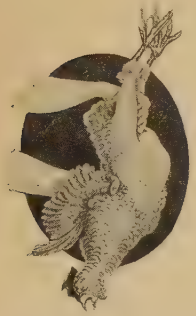
3—PLUCKING THE BREAST AND SIDES

4—PREVENTING TORN SKIN ON BREAST

Fourth.—While one hand continues to hold the wings at the base, work up on the side to the thighs with the other, taking large fistfuls of feathers and being sure to pull upward and twist the forearm outward. It is the knack of properly twisting outward that causes the feathers to pick easily without tearing the skin. Do one side first, then the other.

Fifth.—The breast and sides cleaned, the legs are next. Clasp a leg firmly at its base. Keep the thumb upward. Move the closed hand along the leg, pressing hard enough to strip the feathers. Be sure to work in the direction of the feather-setting, and strip only once; the feathers which remain must be picked by the "pinners."

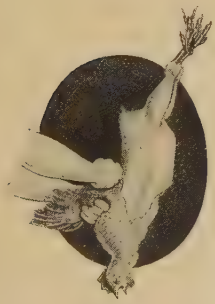
5—STRIPPING THE LEGS



6—PULLING THE SOFT BODY FEATHERS

Sixth.—With the left hand still holding the wing at the base, as the legs are held apart in the shackle, reach over with the right hand between the legs to pull the soft body feathers. Pull upward and toward you.

7—SCRAPING THE BACK AND HIP FEATHERS



7—SCRAPING THE BACK

Seventh.—The trick in easily removing the back and hip feathers is to grasp the feathers with the palm of the right hand outward and then rotate the forearm inwards. This makes a sort of scraping motion, with the forearm rotating on the elbow centrifugally to the left. Continue to rotate the hand, scraping with centrifugal motion down the back to the shoulders. Pull out the little feathers between the shoulders with thumb and forefinger.

Eighth.—With all the bird cleaned except the wings and the neck, now is the time to strip the neck. Clasp it, thumb downward around the base at the breast bone. Strip by sweeping downward. Sometimes two sweeps are needed, one on the upper, the other on the lower part of the neck. Any feathers left should now be picked out. Unless the neck is left until the last, as indicated, the skin will be red and unattractive.

8—STRIPPING THE NECK

9—PICKING THE SMALL FEATHERS ON THE WINGS

Ninth.—Great care must be taken with the small wing feathers, especially near the body. Stretch the wing straight out with one hand and, with the thumb and forefinger of the other, pick the soft feathers in small bunches. If the bunches are too large, the skin will be torn.

Tenth.—To finish the wings, hold each in turn in a vertical position, the thumb and forefinger of one hand pinching the second joint from the body, while the thumb and forefinger of the other hand move downward against the feather-setting to strip off the small feathers on the edges and on the web. The stiff feathers and fans are pulled one at a time by bending them sharply downward and jerking them quickly.

10—CLEANING THE WING EDGES AND WEBS

After roughing, give the birds to "pinners" who complete the work by picking out remaining feathers and pin feathers. It is important that all this be quickly done immediately after piercing the brain, in order to take advantage of the easy pulling while this condition lasts.

The dressed appearance of the different kinds of poultry varies according to the requirements of the local market, or perhaps according to the peculiar fancy of the individual market man.

Chickens, as a rule, are plucked clean in all parts.

Capons usually have the head feathers, the feathers on the last joint of the wing, and a tuft of feathers at the bottom of the shank left on. The tail feathers too may be left on.

Turkeys usually have the head feathers and the feathers on the last joint of the wings left on.

Ducks may be dressed like chickens or they may have the main wing and tail feathers and part of the neck feathers on the carcass.

Geese frequently have the main wing feathers left on.

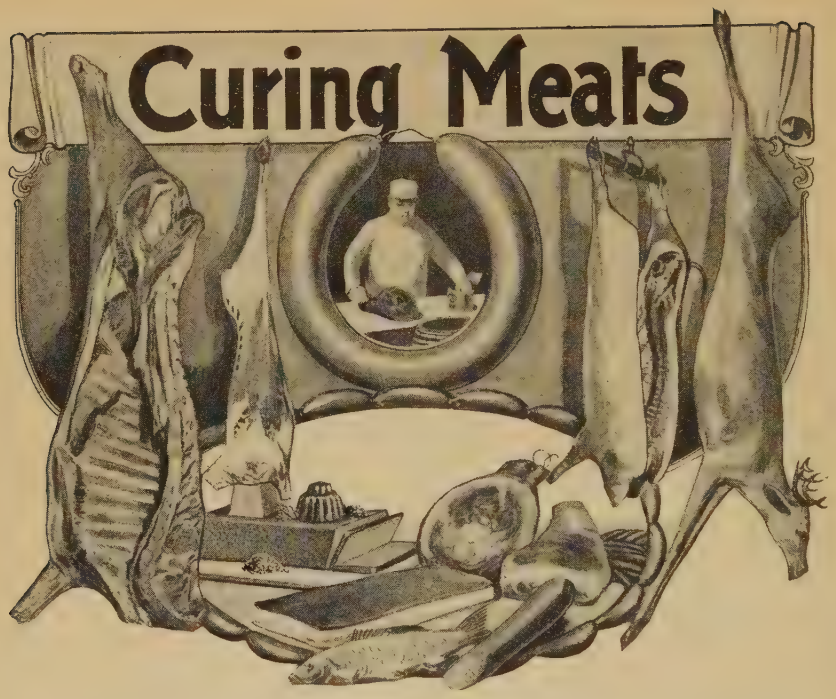
Guineas and game fowl in general are marketed without picking, on account of the dark meat and unattractive appearance of the picked carcass.

Bloody heads should be sponged off clean. It usually adds much to the attractiveness of the carcass if the head is neatly and properly wrapped with parchment paper.

If the crops are bulging with feed, they should be opened and emptied. After that the heads may be wrapped in parchment paper, as shown in the ornamental title at the head of this chapter.

Poultry should be drawn, especially for local immediate use. If the entrails are removed from poultry without spilling any of the contents inside the body, the birds keep better when drawn. If this cannot be done, poultry is better left undrawn to prevent too rapid spoiling in storage. But when not killed for cold storage, a better flavor is maintained by drawing at once. The reason that undrawn poultry, as marketed, keeps much better than drawn poultry is that commercial drawing is hastily done and the contents of the entrails spill over the inside of the carcasses.

Chill the poultry as soon as possible after dressing. This is usually done by hanging the birds on a rack, without permitting the birds to come in contact with one another. Remove immediately to the chill room, which should be maintained at a temperature as nearly 32 degrees F. as possible, without letting the carcasses freeze. When not equipped with a cooler in which the temperature can be reduced to 32 degrees F., then place the chickens in ice water to cool.



Condition of Meat When Put Down Into Cure

Curers of meat who are well acquainted with us know we have been in a position to acquire more than the average knowledge in the curing and handling of meats. As is well known, we have been consulting chemists and packing house experts for many years; therefore, the general information which we offer for curing meats is suggested by the results of many years of practical experience.

Bleeding.—The keeping quality, as well as the color of any meat, is improved if the animal was so killed that thorough bleeding was facilitated. In large packing houses all animals are killed while suspended from an overhead rail by a hind foot. This is convenient and promotes more thorough draining of the blood vessels. The kicking of the free legs helps to pump the blood vessels clean.

The butcher who cannot conveniently hoist his hogs for sticking can force out much of the blood left in the larger blood vessels. With a firm pressure of the hand at the joint in the hams and shoulders, some of the remaining blood can be squeezed out toward the exposed part of the bone.

When cured meats turn out bad, it is not always the fault of the man who has charge of the curing; it is more apt to be in the con-

dition the meat was in when put into the brine to cure. Good results should not be expected from a man who has charge of the curing unless the meat is delivered to him in proper condition. Hogs should never be killed the same day of purchase at the stockyards or from the farmer. They ought to remain in the packing house pen for at least 24 hours before killing. If different lots of hogs are mixed together they will sometimes fight, which greatly excites them. Whenever they show this fighting disposition they should be separated.

Chilling Meats.—As quickly as possible after killing and bleeding, hogs should be chilled. Hams, shoulders, bellies, and other cuts must also be thoroughly chilled before they are put into pickle. From one to two days before being packed, depending upon the temperature, they should be hung up or laid on a rack in the cooler, in order to make them firm and ready for packing. If the growth of germs is not quickly checked by cooling after being killed and the meat is not properly chilled before curing, sour meats result.

Packers using ice machinery for cooling can bring the temperature low enough during warm weather to chill the meat properly; however, it must not be frozen. If one has no ice machinery and the cooler in which the meats are chilled is not cold enough to make the hams, shoulders, bellies, etc., firm and solid in 48 hours, it is advisable to lay the meat on racks over night, covering it with crushed ice; this will harden the meat. Packing crushed ice over meat before curing has proven very satisfactory in summer time to those who have no refrigerating machine but depend on ice for refrigeration.

It should always be remembered that if meat is put into brine soft and spongy, it will become pickle-soaked and in such condition it will never cure properly. It will come out of the brine soft and spongy, and will often sour when in the smoke house. A great deal of meat spoils in curing only for the reason that the animal heat has not been removed before the meat is packed and placed in brine. When the animal heat is all out of the meat, the meat will cure firm and solid all the way through.

In order to get the best results, the inside temperature of hams and shoulders when packed to cure should not be over 38 to 40 degrees F. Before it is packed, the meat should be tested with a thermometer made for this purpose. Every curer of meat should have one of these thermometers. But such a thermometer must itself be clean or it may easily be the means of infecting the meat. A testing thermometer that has been inserted in sour ham or other sour meat should be purified before being inserted in other hams or meats.

Immense quantities of meat are spoiled yearly through the fact that the temperature of the meat is not brought down quickly enough or low enough before the meat is salted. In the summer, hams and heavy pieces of pork should never be packed by persons having no refrigerating machine unless the meat is first put on wooden racks on the clean floor for at least twelve hours with broken ice to cover it thoroughly. If our directions are carefully followed and the Freeze-Em-Pickle process is used, such a thing as spoiled meat will be unknown.

Some packers cut hogs at 24 hours chilling time to get fresh cut loins, etc., but the hams, shoulders and bacon which are intended for curing are placed on wooden racks in the cooler until the desired temperature is reached. The method also gives more hog-chilling space.

Dry salt meat and breakfast bacon are handled the same way as hams, but can be put into cure twelve hours sooner.

When chilled through to the innermost center of the thickest part of the cuts, the meat should be promptly cured or sharp frozen at or below 5 degrees below zero F. and then held in cold storage at 12 to 15 degrees F. till wanted for curing. Freezing meat slowly at a higher temperature ruptures the cells, hastens the subsequent cure, and injures the keeping quality.

Frozen meat prevents penetration by the pickle and dry-salt mixture. When partly frozen or when alternately freezing and thawing, the meat cures unevenly. Frozen green meat, taken from cold storage for curing, should be thawed out at curing temperature (between 38 and 40 degrees F., preferably 38 degrees F.). As quickly as the thawing of the outer cuts permits, the mass should be torn apart to hasten the thawing, in order that the meat may be put into cure with a minimum of delay. Hams, picnics, and other lean meat cuts, thawed out dry, may lose color somewhat in the smoke house. To avoid that, it is better to thaw them out completely submerged in 60-degree plain salt brine at curing cellar temperature. They should not be left in longer than necessary to get all the frost out of them. Such brine can, of course, be reclaimed. Meats that have been sharp frozen and held in cold storage will cure in about three-fourths the time given in the formulas of the following pages.

Tainted or sour meat will take a cure, but its flavor can never be restored; besides, it will contaminate surrounding pieces in dry cure or it may spoil an entire batch of meat put down with it in pickle. For that reason, trimmings accumulating in markets should be

dumped into a receptacle in the ice box, from time to time, until they can be put down properly with Freeze-Em-Pickle in the evening or during a lull in business. The Freeze-Em-Pickle process does actually check B. botulinus (a putrefactive bacillus) and the toxin of botulism is made inactive by heating the meat to at least 150 degrees F. and holding it there for one hour. The tainted odor can be destroyed only with unlawful chemicals.

Cleanliness is one of the most important laws of successful curing, after the animal heat is entirely out of the meat; and it is most emphatically true of sweet pickle cures in particular. Water and other ingredients must be clean and pure. True, boiling and skimming will correct much evil; but the whole thing is simplified if the component parts of the pickle are pure, unspoiled and not contaminated. The vats and kettles in which the pickle is prepared, the filter through which it is clarified (if filtration is practiced), the pipes, hose and buckets through which it is conveyed—all must be sweet, clean, practically sterile, and wholesome. Trapped drains in the floors must be kept open and the hose and squeegee used freely every day. Our Tru-White Washing Powder makes thorough work lighter and the results better, particularly where special effort is needed. It should be used once a week, especially if the daily flushing is omitted.

Air exhausts at suitable places are an excellent aid in keeping the air pure and in preventing the drip of condensed moisture from the ceiling. No open curing packages should stand directly beneath frosted refrigerating pipes where water can drip into them.

In a cooler in which fresh meat is kept, it is very important that the air should be kept in constant circulation. Dead air refrigeration would never do for storing fresh meat because moisture would settle on the meat and it soon would mold. So if anyone is having trouble with meat becoming moldy or slimy when it hangs in the cooler a week, he may rest assured that he hasn't the proper circulation of air in his cooler.

Ice boxes or coolers must be so constructed that the air circulates from the ice chamber or cooling pipes down to the floor on one side, then through the meat compartment, then up on the other side or through the center, back over the ice or refrigerating coils, which absorbs the moisture from the air as it passes over them while circulating through the ice box or cooler. The circulation of air must be so strong that when you go into the cooler with a lighted cigar, the smoke will visibly travel in the described direction when the door is closed.

Finally, the attendants, the trucks, chutes, tables, bins, shelves, scales, tools, the equipment in general and the methods used should be such that visitors can be shown through the curing cellar at any time.

Give close attention to details. Be careful to do everything right as you go along, for if you spoil the meat you will hardly become aware of it until it is too late to remedy your error.

The public does not realize what an expenditure of time, intelligent work, and money, is necessary to fit meat and meat products for general use at all seasons. Once the routine of meat curing, sausage making, and smoking is explained, the visitor is converted to the use of other cuts besides steaks and chops. It helps to establish an economical balance in the consumption of all edible cuts of the meat animal. The visitor realizes that the butcher, the packer and the sausage maker devote costly time and intelligent effort to the improvement of meats which are fully worth the prevailing prices, whatever they be. He learns that there is more to the meat business than simply buying an animal, carcass, or cut for as little as possible and distributing it, in smaller pieces, for as much as possible.

Radical changes in time for curing have been developed by the Freeze-Em-Pickle process. The stringent, excessive cure of the earlier days has given place to a milder cure. Under the process herein described, butchers and packers can get their money back for the carcass in much less time than was possible heretofore. More meats can be handled in the same space and with the same equipment. Cured meat will still keep as long as necessary, and the flavor is immensely improved. The meat is now salable in markets which were prejudiced against it under the old cure. The curing ages under this process meet the requirements of local, state, and federal food inspection.

The methods described are in accord with pure-food laws: they are efficient, economical, and conserve the nutrients, for the Freeze-Em-Pickle process retains the meat juices, the albumin and the flavor in a manner heretofore impossible. The methods have been adopted by many of the most successful packers, and produce meats that enjoy a world-wide reputation.

Ingredients of Curing Mixtures

Salt, Freeze-Em-Pickle and sugar are the necessary ingredients of a curing formula that is strong enough for effective curing and yet so agreeably mild that the cured meat is actually preferred to the

green (fresh). Various aromatic herbs and spices are sometimes used to give the cured meat added piquancy or zest.

Salt is an alkaline astringent curing agent which penetrates the fat and lean of the meat rapidly. Unless it is properly counteracted, it dissolves and draws the meat juices from the meat, leaving it brackish, the fibers tough, hard and juiceless, and causing shrinkage and loss of weight. In the paragraphs pertaining to Freeze-Em-Pickle below, the method of overcoming the objectionable qualities of salt is explained.

The Freeze-Em-Pickle Process is a combined scientific and practical evolution of modern meat curing and replaces the obsolete methods of the past. It stops the waste of the meat juices and nutrients, stops the loss of flavor and color, and counteracts the drying and hardening influence of the salt.

By the Freeze-Em-Pickle process of curing meat the albumen is congealed, the meat juices are gelatinized and held in the meat, a delicious flavor is produced in ham, bacon and sausage meat, and the shrinkage in curing meat is less. The Freeze-Em-Pickle Process permanently fixes the natural, tempting red of fresh, healthy meat. Even ground meats and meat products so cured retain the pleasing red of freshly killed meat to the very center; and the flavor and tenderness will be found even better than the tempting appearance.

Meat sausages and meat loaves made of meat cured by the Freeze-Em-Pickle process have a deliciousness of flavor not found in meat or meat products cured in any other way. Gray centers will be avoided when properly curing with Freeze-Em-Pickle.

The Freeze-Em-Pickle process has the further property of hastening the cure. There should be no souring in the cure of hams or any other meat under this process, when instructions are followed faithfully.

Proportions and directions for the proper use of Freeze-Em-Pickle have been carefully calculated to suit the various meats and meat cuts under ordinary conditions and to fit them for ordinary uses. Each cut of meat which is cured in the daily routine of the butcher and packer is provided, in the following pages, with the curing method and formula suited to it, the method actually in use in many of the highly successful modern packing houses. Best results can be confidently expected when the formulas and instructions are studied and followed to the letter. To follow these instructions insures the use of ingredients best adapted to the purpose for which each cut is ordinarily intended, regardless of climate; it insures the use of the most enlightened modern methods.

The butcher, the packer and the sausage maker that are guided entirely by the curing methods and formulas here published may rest assured that they operate on economically correct principles. The methods and ingredients advocated meet the requirements of local, state and federal inspection, and success will be largely in proportion to the energy expended and in proprotion to the faithful adherence to the detail of our instructions.

Sugar.—Sugar-cured meats are less astringent, less brackish, milder and more palatable than meats cured without sugar. The sweetened cure should be adopted for all meats and cuts adapted to it.

The water supply is an important consideration in every branch of the meat industry. Both quality and the available quantity may be such as to render sanitary and profitable commercial butchering and packing impossible. The curer is interested in the quality of the water mainly for hygienic reasons, and a close watch should be maintained for sources of possible pollution. The dangerous part of an impure water is not necessarily the visible dirt: it is the invisible organic life, the bacteria and fungi, which constitute the real menace. Where the presence of injurious organisms is suspected, the entire water supply must be boiled. Visible organic impurities rise to the surface as scum, in boiling, and must be skimmed off.

As the source of pure water and pure natural ice become more and more restricted near the great centers of population, the practice of chlorinating the water increases. This has no chemical or bad effect on Freeze-Em-Pickle, neither will it affect the flavor or quality of cured meats, but it does not remove the necessity for boiling the water before making the brine if the water is contaminated.

Never use for making pickle the drip water of melted ice from a cooler, even if the ice is made of distilled water, as it contains many impurities. These impurities are often absorbed from the air of the ice box, while the ice is melting, thus rendering the drip-water dangerous in the curing of meats.

Pickle Cure for Meats

How to Make Plain Salt Brine

The curer should vary the concentration or strength of his brine according to the use to be made of it, as shown under the directions for the cure of different meats.

When water has dissolved all the salt it will absorb, it is known as a saturated solution, which registers 100 degrees on a salimeter or brine tester.

The salimeter: for testing curing pickle and pumping pickle

A salimeter is a hydrometer for gauging the strength of salt brine and curing pickle. It is a glass tube weighted to float in an upright position. The depth to which it sinks indicates, on a gauge in the stem, the density or strength of the brine or pickle. As 100 degrees on the salimeter denotes 100 per cent saturation, so any lower degree represents, not the per cent of salt in the solution, but the per cent of saturation. To explain, there are 2.488 pounds of salt in a gallon of saturated or 100-degree salt solution: a lower degree, such as 70, is then 70 per cent of saturation and should contain 70 per cent of 2.488 pounds salt. That is the theoretical principle of present-day salimeters. The following table shows, however, that the density is not in relative mathematical proportion to the salt content.

Our salimeters are especially marked for the meat curer and certified for accuracy. Salimeter readings, to be accurate, should be made when the brine or pickle is at curing temperature, between 38 and 40 degrees F., and the pickle thoroughly agitated in all parts of the container.

A saturated salt solution is saturated for salt only, and the addition of other dissolved solids would float the salimeter even higher than the level of the 100-degree mark. This may be illustrated with the pumping pickle: here the addition of sugar and Freeze-Em-Pickle to full-strength salt brine would cause the salimeter to rise

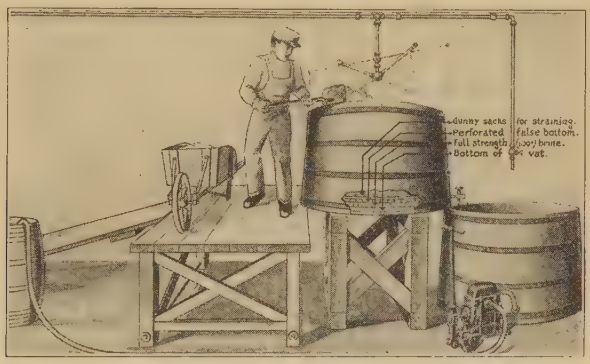
Salt and Brine Equivalents of the Salimeter [1]

Salimeter degree	Weight of brine per gallon (lbs.)	Weight of salt per gallon of brine (in lbs.)	Salimeter degree	Weight of brine per gallon (lbs.)	Weight of salt per gallon of brine (in lbs.)
0	8.32	0.			
1	8.34	0.021	51	9.14	1.166
2	8.36	0.042	52	9.15	1.191
3	8.38	0.063	53	9.17	1.216
4	8.40	0.084	54	9.18	1.240
5	8.41	0.105	55	9.19	1.265
6	8.43	0.126	56	9.21	1.290
7	8.44	0.148	57	9.22	1.315
8	8.46	0.169	58	9.23	1.339
9	8.48	0.190	59	9.25	1.364
10	8.50	0.212	60	9.26	1.389
11	8.51	0.234	61	9.28	1.416
12	8.53	0.256	62	9.30	1.443
13	8.54	0.278	63	9.32	1.470
14	8.56	0.300	64	9.34	1.497
15	8.57	0.322	65	9.35	1.524
16	8.59	0.344	66	9.37	1.551
17	8.60	0.366	67	9.39	1.578
18	8.62	0.388	68	9.41	1.605
19	8.63	0.411	69	9.43	1.632
20	8.65	0.433	70	9.45	1.658
21	8.67	0.455	71	9.47	1.685
22	8.68	0.478	72	9.49	1.712
23	8.70	0.500	73	9.51	1.739
24	8.72	0.523	74	9.53	1.766
25	8.73	0.546	75	9.54	1.793
26	8.75	0.570	76	9.56	1.820
27	8.76	0.593	77	9.58	1.847
28	8.78	0.617	78	9.60	1.874
29	8.80	0.640	79	9.62	1.901
30	8.81	0.662	80	9.64	1.928
31	8.83	0.685	81	9.66	1.956
32	8.85	0.708	82	9.67	1.984
33	8.86	0.731	83	9.69	2.012
34	8.88	0.755	84	9.70	2.040
35	8.89	0.778	85	9.72	2.068
36	8.91	0.802	86	9.74	2.096
37	8.92	0.826	87	9.75	2.124
38	8.94	0.849	88	9.77	2.152
39	8.95	0.873	89	9.79	2.180
40	8.97	0.897	90	9.80	2.208
41	8.99	0.921	91	9.82	2.236
42	9.00	0.946	92	9.83	2.264
43	9.02	0.970	93	9.85	2.292
44	9.03	0.994	94	9.87	2.320
45	9.05	1.019	95	9.88	2.348
46	9.07	1.043	96	9.90	2.376
47	9.08	1.068	97	9.92	2.404
48	9.10	1.092	98	9.93	2.432
49	9.11	1.117	99	9.95	2.460
50	9.13	1.141	100	9.97	2.488

[1] Based on Gideon Harris : "Andel's Answers of Refrigeration for Engineers"

to a point which would be 104 to 108 degrees if the tube were marked above 100.

The pickle or brine for curing can be made by mixing the necessary salt, Freeze-Em-Pickle, sugar, and water in one vessel or container and stirring till the solids are dissolved. If much curing is done, however, it is generally found more convenient and efficient to keep a saturated salt solution (full strength or 100-degree brine) as a stock solution and then make up the Freeze-Em-Pickle solution with part of this, as needed. The stock solution of salt brine is easily made by simply percolating water through salt. It dissolves all the salt it will absorb and so comes out a saturated solution. The vat in which the percolating is done is known as a leaching vat.



SALT PERCOLATING VAT AND BRINE MIXING VAT

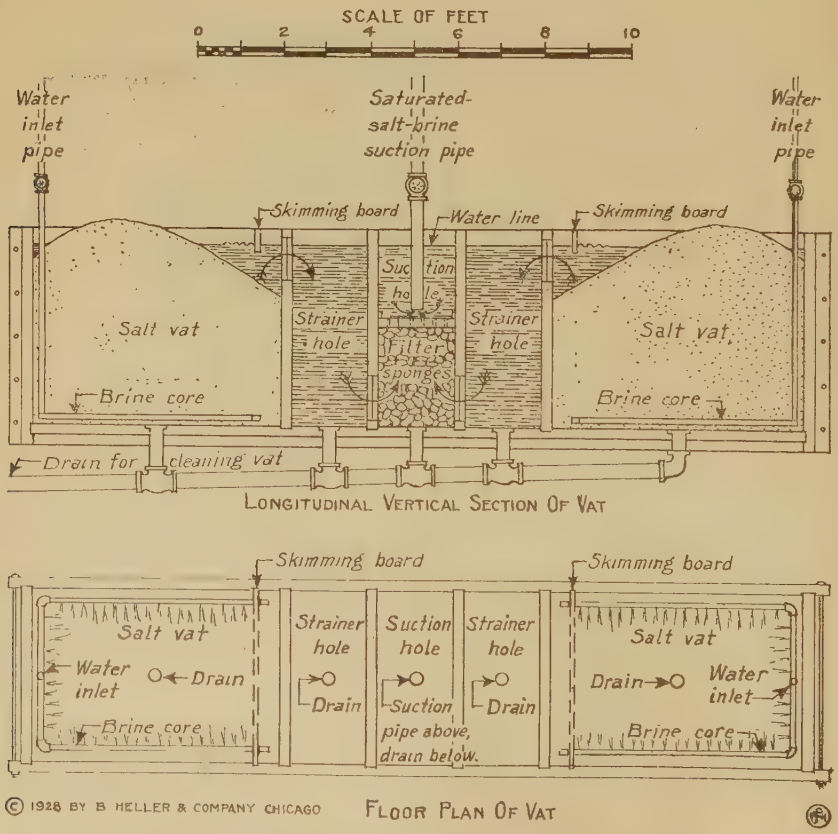
Part of the leaching or percolating vat is shown removed to illustrate the inner construction. The hose and pump convey the brine from the mixing vat to the curing vats and tierces.

The original leaching vat or salt percolator, operated by simple gravity, served its purpose well and has not been improved upon. It is convenient and ample in a packing house of moderate size. It consists of a large circular vat, raised as high above the floor as the height of the ceiling permits. A perforated false wooden bottom inside is covered with sacks. On these, dump the salt, either through a trap in the floor above or by shoveling it in over the side. When the salt percolator is filled with salt, let the water in through a pipe at the top, and draw it off at the bottom as a saturated solution or 100-degrees salt brine. The faucet shown in the illustration extends over another vat which stands lower down and serves as a mixing tank. The pump shown for distributing the brine to the curing vats can be dispensed with if the mixing tank is high enough above the curing vats for a gravity fall.

The salt percolating vat in a large packing house may be located either under the loading dock adjoining a switch track or in or above

the pickle room on the top floor. In the latter case, salt may be carried in bucket conveyors from under the loading dock to the vat or pickle room on the top floor, either directly into the brine vat or to a storage bin. Some houses have found it cheaper to unload the salt car, through gravity chutes, into the space under the loading dock, make the brine there, and then pump the brine to brine storage vats in or above the pickle room, on the top floor.

In some of the large packing houses the vat is about 18 feet long, 4½ feet wide, and about 4½ feet high, built usually of 3-inch plank. Baffles or partitions divide it into several compartments, usually 6-foot salt compartments at the ends, a 2-foot strainer hole for each, and a 2-foot suction hole in the middle. The salt may be shoveled into the two compartments or dropped in automatically through a spout which extends just below the water line. A water inlet pipe



BRINE VAT UNIT OF A LARGE PACKING HOUSE
For making full-strength (100-degree) salt brine by percolation.

at both ends of the vat connects with a 1¼-inch pipe, known as the brine core, which lies on the bottom, extending around three sides of the salt compartment. This is perforated on the inner sides only and has caps over the ends. The water enters the salt vats horizontally through these perforations and rises through the salt bed, dissolving all the salt it will hold. The dust and light impurities and the magnesium and calcium content of salt create surface scum and slimy sediment which give the brine a turbid appearance. A skimming board at the top holds back most of the scum as the saturated brine flows through a fine-mesh brass screen at the top of the first baffle or partions. The brine then usually flows downward, through tightly packed sponges in the strainer holes and through a second fine-mesh brass screen which forms the lower part of the next partition into the suction hole. From this a suction pipe pumps it into the plain-brine storage tanks in or above the pickle room. These storage tanks also serve as settling tanks for the gray, slimy sediment which passes through the screens and sponge filters of the salt leaching or percolating vat.

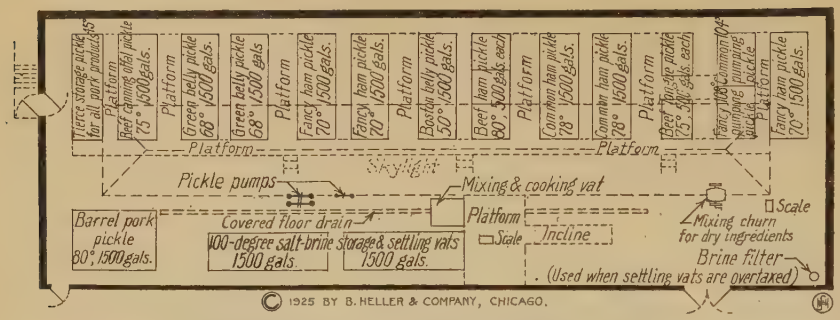
The strainer holes of the size vat described should contain a barrel of sponges each, which are held tightly between 2½-inch perforated planks, secured with cleats. Sometimes the sponges are held in the suction hole only, the suction pipe extending to within 2 inches of the upper plank; but the method is apt to be less thorough in filtering and requires cleaning at shorter intervals. This type is illustrated on preceding page.

If No. 1 salt is used, the percolating vat should be cleaned out every five or six weeks and whenever it becomes necessary. If No. 2 salt is used, cleaning becomes necessary more often.

The Pickle Room

The most economical arrangement for a large packing house is a separate room on a floor above all curing cellars, in which each of the principal pickles is mixed and stored in one or more separate formulating or mixing vats. The pickle should be piped by gravity from the bottom of each pickle vat to the cellar using it. There it may be extended through pipe and hose to any part of the floor.

The following floor plan shows the pickle room of a large packing house. In this case, the salt leaching vat is under the loading dock, adjoining a switch track, and the saturated salt solution (100-degree plain salt brine) is pumped to two storage and settling



PICKLE ROOM OF A LARGE PACKING HOUSE

The salimeter readings given for the different pickles are for packing houses that cure principally for export and long shipments or trying conditions and not for those who produce a mild, fancy cure for local trade under normal conditions.

vats in the pickle room on the top floor, each with a capacity of 1,500 gallons. Where there is ample room, more such settling tanks can be installed to good advantage. A platform should extend around all vats at about the middle of their height if stirring is done with a hoe or other hand implement. At the mixing vat, a larger work platform and scale are a convenience.

To prepare the curing pickle in the packing house, weigh off the exact quantity of sugar and Freeze-Em-Pickle needed, under the formula, for the number of gallons of pickle to be made in one batch.

Nail a board about three inches wide running from the bottom to the top of the brine mixing tank, and mark this board at various heights showing the exact quantity in gallons. To mix 100 gallons, 60 to 70 degrees strong when finished, run in enough 100-degree or full-strength salt brine to reach a little below the 60-gallon mark. To make up 1,000 gallons of brine in a large tank, run in enough full-strength salt solution to reach a point below the 600-gallon mark. Then add the desired quantity of Freeze-Em-Pickle and sugar and run in enough fresh cold water to fill the small tank up to about 95 gallons and the large tank up to about 950 gallons. Then agitate thoroughly in all parts of the vat either with a hoe or by means of an automatic air agitator and agitate until the Freeze-Em-Pickle and sugar have completely dissolved. Then test the strength with a salimeter and if the brine is not quite strong enough, add enough of the full-strength salt solution to bring it up to the desired strength. If it is too salty, add fresh water to bring down the strength to where it is wanted. Fresh water or salt brine should be added as desired to bring it up to the proper level and to the proper strength. After mixing several batches, one will soon find out just how much salt brine to put into the mixing tank to make a certain quantity of finished brine at a desired strength.

To prepare curing pickle in a retail market, simply mix the ingredients as given in our various formulas, add the given quantity of water and agitate thoroughly until the salt, Freeze-Em-Pickle and sugar are completely dissolved.

The temperature of the pickle when put over meat is of utmost importance. In large packing houses it can be cooled by means of refrigerating pipes extending around the inner side of the pickle storage vat. The pickle should not be colder than 35 degrees F., nor warmer than 40, if possible, when put over the meat or when used in pumping.

Don't omit the cleaning, at regular intervals, of the vats in which the pickle is mixed. To remove the slime, scum, and sediment from the bottom and sides of settling vats, storage vats and sweet-pickle vats, use scalding hot water and our Ozo Washing Powder.

Ropy or Stringy Brine

Occasionally, especially in summer, sweet pickle becomes viscous, thick and stringy. This condition is known as "ropy brine." It is a fermentation of the sugar which can always be traced to impure sugar, improper temperature of the curing room, brine, or meat, or to unclean curing packages. Meat in such pickle will not cure and must eventually sour, either in the pickle or in the smokehouse, if the pickle and container are not promptly changed.

Granulated refined sugar is advised for curing, and that may be obtained from either beets or sugar cane. We advise not to use sirup or molasses (refiners' by-products in making granulated sugar) as they contain impurities, to start with, are more subject to contamination, and provide a ready-made culture medium for fungi and bacteria. For these reasons they are more likely to cause trouble through ropy brine, particularly under irregular or summer temperature.

However, even if pure granulated sugar is used and the temperature of the curing room is too high, the brine is liable to turn ropy anyway. It is, therefore, absolutely necessary for any one who intends to cure meat in sweet brine not only to use the proper kind of sugar but also to cure in the proper temperature. Otherwise, the results will not be satisfactory, no matter what kind of curing agent is used.

The condition of the meat when put into cure may cause ropy brine. It must be chilled through to the very marrow in the bone and it must be firm to the touch at the time it is put down, and not soft or flabby.

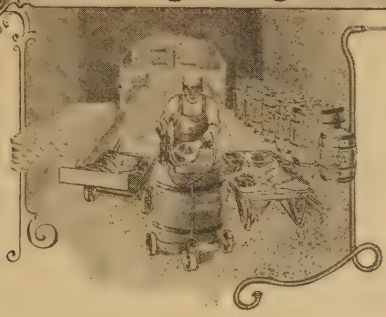
It is not enough merely to rinse out a tierce or vat before putting down the meat in it. The work must be done thoroughly; the scalding must be done with boiling water or with live steam and, in the absence of either, it is very necessary to use Freeze-Em in the washing water. Freeze-Em is a cleansing agent and must not be confounded with Freeze-Em-Pickle, a curing agent.

The drippings of condensed moisture from the ceiling or from over-head pipes must never fall into the pickle or into the meat curing vats as they are almost sure to cause trouble. Excess moisture should preferably be drawn out of the curing cellar by means of exhaust fans, through air chambers extending to different parts of the room. However, this must be carefully regulated as the temperature of the cellar should be kept between 38 and 40 degree F. if possible.

If brine has become ropy in a curing package and it is desired to use that package again, it is necessary to scald such package thoroughly, using Ozo Washing Powder with boiling water so as to prevent the possibility of fermentation. Otherwise, the unclean package will cause the fresh brine to turn ropy, even though it is made with the right kind of sugar and kept in the proper temperature. When it is possible, always clean out the vats or tierces with live steam, as this kills the germs of fermentation.

Meat taken out of ropy brine must be promptly washed and put down in fresh brine in a clean container. If it is not properly washed, the new brine, even in a properly cleaned and sterilized container, will turn ropy again, sometimes in less than 15 days. Even with careful washing of the meat that has been in ropy brine, the new brine in which that meat is put down will eventually become ropy. Therefore, meat repacked out of ropy brine should be sold as soon as possible.

Pumping Meat for Curing



We highly recommend pumping hams, shoulders and other kinds of meats during the curing process. It is a safeguard in hams and shoulders against shank and body souring should they, through some carelessness, be insufficiently chilled all the way to the bone or frozen, which often occurs. Pumping is a protection against sour joints and insures a uniform cure. It is also a great advantage to pump large pieces of breakfast bacon, corned beef, tongues, dried beef, dry salt meats, etc.

There is a mistaken idea among many butchers and packers that pumping hams and shoulders is injurious to the meat. The facts do not warrant such a belief as the best cured and the best flavored meats are those that have been pumped. When hams and shoulders are not pumped it requires weeks for the pickle to penetrate through to the bone, which is the critical spot of a ham or shoulder. If the joints, tissues and meat around the bone are not wholly and thoroughly cured, the entire ham or shoulder is inferior and dangerous because it furnishes a favorable seat for the development of the germs of putrefaction, which render the meat unfit for human food. Without pumping, it would take so long for the curing pickle to penetrate to the innermost part of large cuts that the centers of large hams might easily sour before they could be cured thoroughly. Pumping saves time both in curing and in smoking.

Pumping pickle is not the same as the pickle in which meat is cured, but much stronger. We recommend two stock pumping pickles—one for mild sugar-cured meats is referred to in the formulas as "Fancy Pumping Pickle"; the other is referred to as "Dry-Salt Pumping Pickle." Both should have a strength of 100 degrees or more on the salimeter, because only full strength brine will prevent the growth of the germs of putrefaction close to the bone or center of the cut. All the different kinds of meat use either the "Fancy" or the "Dry-Salt" pumping pickle.

When common brine or ordinary sweet pickle is used for pumping, the hams or shoulders usually become pickle-soaked and if the refrig-

erator under such conditions is not the very best and the meat not thoroughly chilled, the smallest degree of animal heat which may remain will start fermentation, causing the meat to sour next to the joints. It is therefore plainly to be seen that pumping under such conditions, instead of doing good, will in reality result in injury, and this is the reason why so many who have tried pumping meats have failed. On the other hand, when the pumping brine is made as shown herein, all of these objections are overcome and the meat will not be pickle-soaked, nor will it become soft and flabby. The brine will be absorbed by the meat around the bone and joints so thoroughly as to leave no trace of it after the ham or other meat is cured. The process also gives the inside meat a fine red color and a delicious flavor. Hams that have been properly pumped with Freeze-Em-Pickle brine and cured by the Freeze-Em-Pickle process will not dry up and become hard when fried or cooked. When sliced cold they will not crumble, but will slice nicely and have a delicate and pleasing flavor.

Formula for Sweet Fancy Pumping Pickle, 105 degrees strong. Mix any quantity in the following proportions:

1 pound Freeze-Em-Pickle,
2 pounds dry salt,
1 pound best granulated sugar,
1 gallon water.

Formula for Dry-Salt Pumping Pickle, 101 degrees strong. Mix any quantity in the following proportions:

1 pound Freeze-Em-Pickle,
2 pounds dry salt,
1 gallon water.

Dissolve the solids completely by stirring. If the pickle then tests less than 100 degrees on the salimeter, make sure that the solids are completely dissolved. If, when making pumping pickle, it should not test 100 degrees strong on account of having made some mistake, stir in more Freeze-Em-Pickle and salt until the strength of 100 degrees is reached. No harm is done by using pumping pickle that tests over 100 degrees on the salimeter. But never use it when it tests below 100.

The meat curing pump is used for forcing pickle into hams, shoulders, and other lean meats to insure a quick, positive, equalized cure. The style shown in the heading of this chapter is equipped with ratchet device on a dial, which can be set to adjust the length of the stroke and then renders it impossible to make anything but a full stroke. The dial shows the measure of the definite quantity of pickle delivered at each stroke of the pump handle. In present-day packing-

house practice it is usually set to deliver from 2 to 4½ ounces of pickle at each stroke. As it is impossible to make anything but a full stroke of the lever or handle, the quantity of pickle pumped into the meat can be accurately regulated according to the size and nature of the meat.

The pump is usually attached to a barrel cover, the cylinder extending down to the bottom of the barrel. Be careful to keep the surface of the pumping brine above the suction valve at the bottom; otherwise air is pumped into the meat and souring is practically sure to result. Be careful, too, to see, that there is no air space between the pickle and the point of the hollow needle. Air pumped into the meat would be worse than no pumping.

In large packing houses the pumps may be attached to brine pipes, under a pickle pumping table, which lead directly from supply tanks in the pickle room on an upper floor.

The pumping needle is a bluntly pointed tube, about 8¼ inches long, 9/32 inch in diameter. It has a row of small perforations on each of four sides. By means of a screw thread, it is coupled to the end of a short hose extending from the force pump. Stab the needle into the meat with one hand (the insertion being known as a "Stitch") while the pump handle is operated with the other, delivering one or more strokes at each stitch. Turn the meat with the hand that holds the needle, the inserted needle serving as a meat hook.

PUMPING NEEDLE

The needle itself must be kept clean. If it has been inserted in meat that is already sour, it should be purified before being inserted in sound meat.

Before actually starting the pumping of meat, it is important that the pickle be forced up to the point of the pumping needle through preliminary strokes of the pump handle.

To prevent the draining out of pickle after it is pumped into the meat some curers stop to plug up each stitch hole with the thumb In larger operations the pumper must keep going to get the meat cured as quickly as possible and his loss of time would not offset the doubtful saving of pickle. The experience in packing houses where meats enter the vats without undue delay is that 20 per cent (or one-fifth) of the pickle drains out again between the pumping needle and the vat; but much of that is caught in the barrels which stand under the pump and table. The curer who takes pains to retain more of

the pickle in the meat pumped can make but very little if any allowance for pickle so saved in calculating the quantity to be pumped.

Specific directions for pumping any cut of meat, in curing by the Freeze-Em-Pickle process will be found on the pages devoted to the cure of that particular cut. To guard against the souring of thick cuts and to give meats a uniform cure, bright color and delicious flavor, those directions should govern in every detail. They express the matured results of the experience of generations: they are in accord with modern practice in some of the largest houses using Freeze-Em-Pickle whose excellent products may be found the world over.

Packages for the Pickle Cure

Any available container that is water tight, clean and odorless may be used for the Freeze-Em-Pickle cure. Crocks, tubs, tinned or galvanized iron containers, vats, tierces, barrels, half barrels, etc., may serve satisfactorily if they are large enough to contain the meat to be cured and the necessary curing pickle to submerge the meat.

Curing Vats.—The great bulk of all pickle or brine curing is done in casks, commonly known to the trade as "vats," varying in size from those containing 1,000 pounds of meat to such as contain 1,400 pounds, the preference depending largely on the quantity of meat to be cured and available room. Larger vats should not be used because they cannot be handled or cleansed efficiently or economically.

"DOUBLE-DECKING" ON A DOUBLE ROW, S.P. CURING CELLAR

Line up the vats in alternating double rows, with an aisle wide enough for a push truck between double rows. A single or upper tier

may be placed on the double lower row so that each upper vat stands over the center of a triangle of three lower vats. When a second tier of vats is to be placed upon a single row, leave a space of 1 foot between vats, not only to make the support firmer, but also to make the contents of the lower vats accessible while the upper tier partly

1-foot space between vats makes a firmer base and leaves room enough for overhauling without first moving the 1400 pound vats.

"DOUBLE-DECKING" ON A SINGLE ROW, S.P. CURING CELLAR

covers them. In double rows, place all vats snugly together, without loss of floor space. A 1500-pound vat (to contain 1400 pounds of meat) occupies a circular space about 4 feet in diameter. "Double decking," with an 8-foot free passage, sixteen vats may be placed in the usual 16-foot section or bay. Thus the capacity of each 16-foot section in a sweet-pickle curing cellar is 22,400 pounds of meat in cure. The necessary floor space will be easily calculated if the number of animals to be cured and their average weight are known.

Standard specifications of a 1500-pound curing vat are: built of oak, preferably white oak; the staves and bottom about 1¾ inches thick; the staves chamferred (that is, grooved and beveled to engage the head); 42 inches high; diameter 40 inches at the top and bottom, 46 inches at the bilge; three 14-gauge metal hoops, 2 inches wide, at the top and three at the bottom (six in all), two of them at the end and one at the quarter; weight 275 pounds. The heading consists of merely fastening a wooden grate in the top to keep the meat entirely submerged. With its 1400 pounds meat and about 700 pounds pickle, each vat may be calculated to weight about 2400 pounds, packed.

Cement curing vats cost more than oak: they are unsatisfactory in practice and should never be used. Meat cannot safely be cured in them after they become old, as they cannot be sterilized economically or properly cleaned.

Cleansing Curing Packages

All curing packages should be taken out of the cooler, after the meat has been cured in them, and scalded and washed thoroughly clean with hot water and our Ozo Washing Powder, which is a thoroughly reliable cleansing powder. When packages have been effectively cleaned, they should be put out in the sun and allowed to remain there for a day or two. The sun will dry them and the fresh air sweeten them.

In the modern packing house vats should be scrubbed with brooms and boiling hot water, after each use. They may then be placed in a sterilizing room, which is filled with live steam, and held there for ten minutes. They should then be rinsed in hot water, rolled out to sun and air, on the bilge or side, and allowed to remain there until dry. They are then ready for use again.

Machines may be used profitably for washing barrels, tierces and vats in large packing houses. They make it possible to use steaming hot water with our Ozo Washing Powder, rendering the curing package as sweet and clean as when new. The size washing machine for barrels and tierces requires 3 to 4 h. p. to operate and cleans 60 to 100 per hour. The larger size, for vats, requires about 10 h. p. and is equally efficient.

Some packing houses have a boarded roof, with the elevator extending to the roof. After washing barrels and vats they bring them up to the roof and allow the sun to sweeten them. This airing and sunning of curing packages are necessary in correcting meat curing. All utensils used in the curing of meat should be handled in the same manner whenever possible.

When placing tierces or vats in the sun, in order to prevent the sun from shrinking them or loosening the hoops (if they are not needed for immediate use), it is best to turn them bottom side up, placing blocks of wood under the edges so that the air may circulate under them to keep them sweet. At the same time keep a little water on the end that is turned up as this keeps them from shrinking.

Cleaning Lard Tierces for Curing Purposes

Butchers experience a great deal of trouble when they use second-hand lard tierces for curing meats. The lard soaks into the pores of

the wood, and there it becomes rancid and tainted. This rancid lard which remains in the pores will, in time, contaminate the brine and also the meat.

No extent of washing or scalding will thoroughly cleanse such tierces or make them as good as new. Notwithstanding every precaution taken, there is still left in the tierces a taint which affects the flavor of the meat.

BURNING OUT A LARD TIERCE

Burn out the tierce. This draws the lard out of the pores of the wood and consumes it while charring and purifying the inner surface. When the inner surface of the wood begins to char, up-end the tierces, the open end down, to smother the flames. Do not let it burn long enough to weaken the structure of the tierce. Then rinse out with clean, boiling water.

The Use of Molasses and Sirup Barrels in Curing Hams

Never use old molasses barrels or sirup barrels for curing meat, unless they have been first thoroughly soaked, scoured and steamed, and cleansed with our Ozo Washing Powder. It is best to use oak tierces, and always be sure that they are perfectly clean and sweet before putting the meat into them to cure.

Putting Down Meats in Pickle Cure

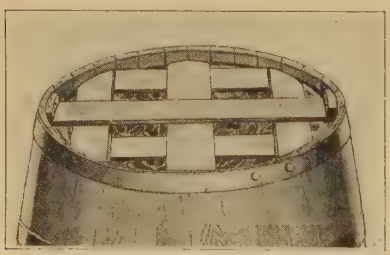
The meat being chilled through to the innermost center and no trace of animal heat being left even in the bone, the cuts are ready for the vat, tierce or barrel. The brine or pickling mixture should, before the meat is put into it or before the pickle is added to the meat, have a temperature as low as 36 to 40 degrees F., if possible. Meat can be cured and is cured, in many places, at a higher temperature. But when it is, the results are not as satisfactory as when the proper temperature is maintained.

The different meat cuts and even the different averages should be kept separate, as far as possible, so that each entire lot may receive the treatment suited to it, at the pump and in the cure. If barrels or tierces are used, the meats should be placed on end; if curing vats

are used, the meats should be laid flat, the skin-side down. It is not necessary to rub with salt the meats which go into the Freeze-Em-Pickle brine cure, nor is it necessary to spread salt on the bottom of the curing vessel. The exceptions to this rule are fully noted in the formulas on the following pages.

A water-proof tag, known as a "fish tag", should be attached to the first piece put down. This should bear a lot number identical with the number on the record tag hung out over the edge of the container. This tag serves to identify the lot in case the outer record tags are interchanged. After the second overhauling, the "fish tag" will be at the bottom of the container: after the first and third overhaulings, it will be at the top.

A practiced hand should throw the hams, sides or other cuts from the truck into proper place and position in the tub, tierce or vat, without the use of hooks. Pile up the meat, layer upon layer, all with skin-side down except the topmost layer: turn that skin-side up. The quantity of meat which is to be packed into a tierce, barrel or vat, is given in the directions of each cut. A little practice will show the curer how closely or how loosely the meat must be packed in order that the container may be filled to the proper level and that the pickle may circulate properly between the meat. For all ordinary purposes, put down 185 pounds of meat (green weight) to cure in a barrel, and 285 pounds in a tierce.



HOW MEAT IS HELD SUBMERGED IN THE BRINE

On all curing vats and barrels place freshly cleaned wooden boards, grate or rack, known as a "heading" over the meat fastened under lugs or cleats (in the top of vats). This is to keep the meat completely submerged after the pickle is poured over it.

Before adding the pickle it is well to test its strength again with a salimeter. There is too much at stake to warrant careless haste. Then pour pickle of the right strength over the green meat until the surface is above the heading.

The pickle shrinks by absorption, evaporation and perhaps by leakage. In making the daily inspection of the condition of the pickle, add sufficient to keep all the meat entirely submerged.

In closed tierces and barrels, put down the meat just as in open containers, but leave the bung out of the side. Here, too, turn the top

layer butt up or skin-side up. Pack all the other layers alternately, butt down and butt up. Then head up the tierce or barrel securely, lay it on its side, and fill it through the bung hole, brim full with the particular pickle or brine required for the meat inside. Leave the container in this position until the following day. Then "top off" (refill) the shrinkage of pickle, and tightly bung the tierce or barrel.

Whenever any container develops a leak which cannot be repaired or stopped, immediately transfer the contents to a watertight container.

Why Overhauling Meat in Cure is so Necessary

The meat in cure may have spots that are in close contact, so that the pickle cannot penetrate between the pieces. Furthermore, the pickle standing undisturbed, gradually becomes of uneven density (strength) so that the upper meats may be in weaker solution than the lower. To overcome these conditions, meats in pickle must be overhauled or repacked periodically during the curing period. Full details are noted in the specific directions for the curing of each kind of meat. These overhaulings are a highly important part of the curing process and must not be omitted or even postponed on any account in cases where the curing formula calls for them.

In open vats, open tierces and other open containers, overhaul by transferring both the meat and the pickle into another container of like size. Place a clean empty container beside that which is to be overhauled. Take the meat out of the pickle, piece by piece, and place it in the empty container. Owing to "swell" or gain in the weight of the meat and to the necessity of transferring the same brine to the new vat or tierce entirely, place the bellies and hams more carefully in overhauling, as the new container may not otherwise be large enough.

When all the meat has been transferred, bail out the pickle with a bucket or pump it out of the old container on the meat in the new container. If there is not enough to cover the meat and the "heading" (rack or board), add new pickle of the same strength to make up the shortage.

Overhauling closed tierces and closed barrels. Simply roll the containers on their side at fixed intervals. Rolling a distance of 25 yards and return (50 yards in all) is sufficient to change the position of the pieces, to change the contacts and to agitate the pickle. A

little experience enables the curer to determine, by the sound of the contents in rolling, if the container is not completely filled and requires added pickle. In that case, he should take out the bung, "top off" the brine with brine of the same strength, and securely close the bung hole again. If the container still leaks at overhauling, it is better to repack the meat in another at once.

Although closed tierces and barrels are more easily overhauled than open vats, they have been almost entirely replaced with open vats and open tierces. The principal reasons for the change are that the vat lends itself better to the larger cuts, the pickle is more easily watched in open containers, and proficient coopers are not always available for proper opening and heading of tierces and barrels.

How to Handle Meats that are Fully Cured when there is No Market for Them

If hams or other sweet-pickle meats are not immediately to be smoked for shipment, they can be held in pickle after they are cured, perhaps 10 days longer, providing the cooler is at the right temperature. This may necessitate an extra overhauling, but this must be determined by the man in charge of the curing. In any event, do not allow the pickle to become ropy. If the meats are put into fresh pickle when they are fully cured, it reduces the color, and has a tendency to pickle soak them. Left in the old pickle, they are apt to become "rusty."

It is advisable to grade the hams or other meats before curing. You will then know what sizes are in stock and which are ready to smoke. This will give the sales department a chance to sell ahead and inform customers exactly when the meats can be shipped.

When the hams or other meats are fully cured, the best way is to soak, wash, smoke and sell them. On the other hand, if there is no demand for them, take them out of the brine and drain on wooden racks over night. Pack in barrels or tierces very compactly and put them into a temperature of 28 to 30 degrees F. They can be kept for months in this way and will come out like freshly cured hams if they are cured by the Freeze-Em-Pickle process.

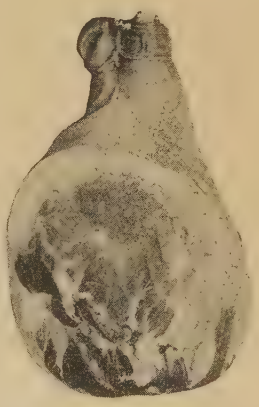
The way large packing houses handle surplus meats is to sharp-freeze them green (at 5 degrees below zero F.) and then to carry them at 15 degrees above zero F., thawing them out and then curing them as needed.

Forcing the Pickle Cure

To gain time in an emergency, sweet-pickle meats can be given an additional pumping at the first overhauling and the intervals between overhauling can be shortened to admit of an extra overhauling. At this second pumping, the curing pickle should be used for pumping, instead of the pumping pickle: otherwise the forced meats would become too salty.

Force-cured meats must not be left in cure for the full regular cured age, or they will become too salty.

Directions for Fancy Sugar-Cured Sweet-Pickle Hams



Selection.—Any selected ham can be made into a fancy cured ham under the Freeze-Em-Pickle process. First sort the hams into three classes:

Small hams, 7 to 13 pounds,
Medium hams, 14 to 18 pounds,
Heavy hams, 19 to 24 pounds.

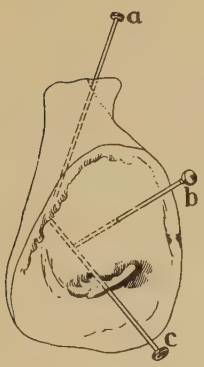
Pumping Hams.—Small hams may be cured successfully without pumping, but it is better, both for flavor and for safety, to pump them all, whatever their weight and size. Pumping reduces the time for curing and unpumped hams and shoulders should be left in cure one-fifth to one-fourth longer than the scheduled time given in this book for pumped hams and shoulders. Hams that are pumped can be smoked in much less time than hams that are not pumped.

Use the Freeze-Em-Pickle fancy pumping pickle, made by dissolving the curing agents in cold water in the following proportions:

Freeze-Em-Pickle Sweet Pumping Pickle

1 pound Freeze-Em-Pickle,
2 pounds dry salt,
1 pound best granulated sugar,
1 gallon cold water.

The accompanying diagram shows the position of the pumping needle at the three "stitches" given to medium hams—one from the shank end, shown at "a"; one from the butt end to the stifle joint, under the hip bone, into the fleshy part, as shown at "c"; and one at



the thigh, along the bone, as shown at "b". Heavy hams receive a fourth stitch in the fleshy body of the ham, over the hip bone. Solid lines in the diagram show the pumping needle up to the point of entry into the ham, and dotted lines show the direction of the needle inside the ham.

If the pickle pump being used has a dial with an indicator, set it, for fancy hams, to deliver 2½ ounces Freeze-Em-Pickle pumping brine at each stroke of the pump handle. Allow as many strokes as necessary to pump an ounce of pumping brine for each pound of ham. Thus a 12-pound ham will receive five strokes, 5x2½ ounces being 12½ ounces of brine. Roughly speaking, it will take about 1¾ gallons pumping brine to the tierce (285 pounds of hams).

Putting Down Hams in Cure.—Immediately after pumping, pack the hams in clean, odorless, water-tight curing packages. Keep the different averages (weights) separated, putting down each lot in a separate container. If there is only one containerful, they may be put down together, grading them for weight at the last overhauling only, so as to have the small hams at the top for first removal. In any case, arrange them loosely so as to get as nearly the exact 285 pounds of hams as possible into a tierce, or 1400 pounds into a standard curing vat. In tierces and barrels, place the bottom layer butt down shank up, reversing alternately after that. No harm is done by laying them in the most convenient way. In vats, the hams are laid flat, skin-side down except the top layer, which is reversed, skin-side up. Weight them down with a weight on clean boards or fasten the boards with not more pressure than enough to keep the hams submerged and in their place when the brine is poured over them.

More than 285 pounds of hams can be packed in a tierce, but this never should be done, as it requires a certain proportion of brine to a given quantity of meat. When packing 285 pounds of hams in a standard tierce, the tierce will hold about 17 gallons of brine, the proper proportion for this total weight of hams. If too much meat is put into the tierce, it will not hold enough brine to cure the meat properly. The properly cured 285 pounds of hams will weigh over 300 pounds when taken out of brine.

The curing pickle for sweet-pickle hams is then poured over the hams. Use the following proportions of Freeze-Em-Pickle, salt, sugar, and water to obtain the best results.

Freeze-Em-Pickle Ham Curing Brine

For each 100 pounds of hams, use
- 8 pounds common salt,
- 1 pound Freeze-Em-Pickle,
- 2 pounds best granulated sugar,
- 6 gallons cold water.

Or for each 100 gallons of cold water, use
- 133 pounds common salt,
- 17 pounds Freeze-Em-Pickle,
- 33 pounds best granulated sugar.

These will test 70 degrees on the salimeter or brine tester, at curing temperature.

Don't trust to memory. Fasten a lot number to the first ham put down. This tag is known as the "fish tag". A card in the card holder should plainly show the same number, as well as the date of putting down. Hang the holder conspicuously over the edge. At each subsequent overhauling, write that date, too, on the card in the holder and shift the holder to the new vat or other container. Whether curing in large or small quantities, it is necessary to keep a perfect record of the number of pieces, their average green weight, and the progress of the cure. Whether all the information is given on the card or in books is not important; but the record in some form is necessary, as well to manage the cure correctly as to keep track of the stock on hand.

Overhaul sweet-pickle hams on the fifth, tenth, and fifteenth days of their curing age. The methods of overhauling are fully described on pages 64 to 65.

The length of time to cure sweet-pickle hams, by the Freeze-Em-Pickle process, for thorough cure and smoking, differs according to the size of the hams, as follows:

Small hams, 7 to 13 pounds, cure 26 to 34 days,
Medium hams, 14 to 18 pounds, cure 38 to 45 days,
Large hams, 19 to 24 pounds, cure 49 to 56 days.

The following schedule adapts the usual packing-house averages to the Freeze-Em-Pickle process:

S. P. HAMS (Green Weight)	Age When Fully Cured
7 to 9 pound average,	26 days,
9 to 11 pound average,	30 days,
11 to 13 pound average,	34 days,
13 to 15 pound average,	38 days,
15 to 17 pound average,	41 days,
16 to 18 pound average,	45 days,
18 to 20 pound average,	49 days,
20 to 22 pound average,	53 days,
22 to 24 pound average,	56 days.

For quickly curing hams for boiling, see page 69.

Then soak the hams to remove excess salt before they go into smoke. The length of time for soaking fancy sugar-cured hams is 5 minutes, in cold water, for each day they have been in cure. Then take them out of the water and string them. Wash in hot water, scrub them with a scrubbing brush and hang them up to drip for half an hour before putting them into the smoke house. Ham smoking is fully treated in the chapter on Smoking. See page 286.

The pickle remaining after the Freeze-Em Pickle cured hams are removed from it is weaker than when first made because the hams absorb part of the curing agents. About 63 per cent of the original salt, about 64 per cent of the original Freeze-Em-Pickle, and about 71 per cent of the original sugar will usually remain in the brine after the meat is fully cured. This is known as "No. 2 Ham Pickle", which can be cooked, filtered and renovated for certain special cures; but it is not suited for curing hams and other fancy meats.

Skinned hams are American (short-cut) hams that have been skinned to within 4 inches or less of the shank. The fat on them has been cut down to the thickness of about ¼ inch. The skinned weight is always taken as the weight in fixing the length of cure. To turn out the best quality of cured, skinned hams, handle and cure them in the same way as fancy sugar-cured sweet-pickle hams.

SKINNING A HAM

Boiling hams are American (short-cut) hams, not excessively fat. To turn out the best quality, cure them in the same way as fancy sugar-cured sweet-pickle hams. With the Freeze-Em-Pickle cure they can be taken out of brine to boil for quick use as early as fifteen to twenty-five days after putting down. The flavor will differ according to the length of time in cure, but many prefer to eat the mild-cured boiled ham.

Fancy skinned boiling hams are skinned hams fully cured and smoked and sold for boiling or for baking. To turn out the best quality, take selected fresh hams, skin and cure them in the same way as fancy sugar-cured, sweet-pickle hams.

Boneless Boiled Hams

BONELESS BOILED HAM.

The selection for boneless boiled ham is made from American (short-cut) hams, taken out of cure with bones in. They have a better flavor than those cured after boning. Boiling-hams intended to be cooked and used immediately may be taken out of the Freeze-Em-Pickle cure in shorter time than those intended for thorough cure and smoking. Following is the shortened process.

Pump the hams with Freeze-Em-Pickle fancy pumping pickle (formula page 65), at the rate of one ounce pumping pickle for each pound of weight in the ham. Then put them into Freeze-Em-Pickle ham curing brine (formula page 67) according to the following table and cure at a temperature of 45 degrees F.

Number of Days for Quick Cure by the Freeze-Em-Pickle Process for Cooking and Immediate Use

Small hams,	**(7 to 13 pounds),**	**cure 13 to 17 days,**
Medium hams,	**(14 to 18 pounds),**	**18 to 23 days,**
Large hams,	**(19 to 24 pounds),**	**25 to 28 days.**

Overhaul on the fourth, eighth and twelfth days.

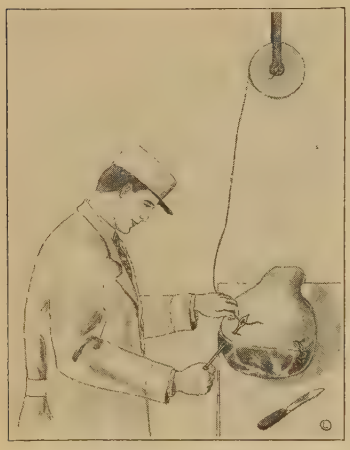
For the finest flavor, uniform throughout, select only such as are fully cured, in strict accord with the formulas and directions on page 67. When heavy or skinned hams are used, cut off the hocks for sausage meat or other uses.

DEFATTING A HAM

Soak in cold water, for a period of 1 to 2¼ hours, according to their age in cure, to remove excess salt.

Then immediately proceed to defat them. Dip an ordinary skinning knife in hot water and slide it under the skin, from side to side, to the shank. Turn the skin over the shank to expose the fat and carefully peel it off without getting any of the lean. The fat limits are gov-

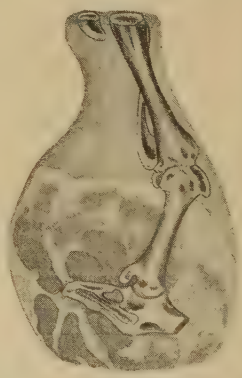
erned by local demand. Then sew the skin back in place, making two stitches, one on either side, with heavy packing cord and a tool known as a "ham stringer". They roll better.



"SEWING" A DEFATTED UNSKINNED HAM

After defatting, immediately bone the hams, preferably still at curing-cellar temperature. It requires much practice to remove the bones cleanly and quickly, with the fewest cuts and the least mutilation, in order that the meat may slice well in the retail shop.

A good method of boning is as follows. Turn the ham skin-side down. Cut out the aitch-bone from the butt end with a thin boning knife. Chisel around the stifle with a ham chisel through the opening at the butt. Swing the opposite end to and cut out the shank bone through the shank end. Then swing it back again and take out the stifle through the opening in the butt. Then one stitch at the butt end and one at the shank end hold the cut parts together. This method mutilates the ham less than any, and the pressed boiled ham slices better. The ham chisel is used only on the stifle.



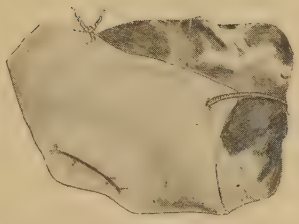
SITUATION OF BONES IN A HAM

BONING A HAM

A good boner, by this method, bones 13 to 25 skinned or 10 to 20 unskinned per hour.

A little Zanzibar Brand Savory Jell-Jell scattered in the cuts of the boned ham before pressing makes the boiled ham slice better and gives it a delightful flavor.

Then sort the boned hams, not into averages but into lots divided to the pound, in order to determine the length of time they are to remain in the cooking vats or kettles and to bring those of like weight together in the same cooker. Some careful ham boilers sort



BONELESS HAM, TIED FOR BOILING, SHANK TURNED IN

METHOD OF STRINGING SKINNED, BONELESS HAM FOR BOILING

even to the half pound. Where the run is too small for such division, place the lighter weights in the top of the cooker, in order that they may be removed when done while the larger hams are further cooked. If the boning discloses a ham with bloodshot, bruised interior, such ham would better go into sausage trimmings.

HAND PRESS FOR TUBULAR HAM RETAINERS

Immediately after sorting, press the boneless hams that they may cook into readily sliced forms. If galvanized or sheet-steel tubular ham retainers are used as forms, then first wrap the boned hams individually, either with newly cleaned canvas cloths or with six loops of twine, to suit varying demand. If wrapped in cloths, then draw the cloths tightly over the ends of the rolls to prevent elongation of the hams in the press. Inclose the wrapped hams in individual retainers and forcibly compress them into the smallest practicable volume. Ratchets over the opening clasp the edges of the retainer together automatically until released after cooking and cooling. This style adjusts itself to the size of the ham. The ham retainer must not be too large for the ham, otherwise it will not compress completely and a hollow center may result, or the folds of the meat may separate in slicing. The ham binding press may operate by hand, steam, air, or hydraulic pressure.

A NEWER TYPE OF HAM RETAINER

Ham containers of fixed dimensions, but with compressible lid, can be obtained in many shapes and sizes. If these are used, wrapping with twine or cloths may be dispensed with. They are better adapted for this use as the shank is compressed into the body of the ham and a larger part of the ham will slice than when boiled in the old-style tubular retainer. They are fast displacing the tubular container, especially in small operations. Heavy skinned hams can be divided into two parts for use as boneless boiled hams. They can be pressed separately in the newer style of containers and come out looking like two boiled hams.

COOKING B. B. HAMS

From the presses, move the hams directly into the cooking vats or kettles or into the newer vapor boxes. It is an economy to provide covers for kettles and cooking vats and to keep those covers in place. Vapor boxes have proven economical, but the saving has not proven sufficient to warrant the tearing out of vats which still function properly. Have the water in the kettle or vat sufficiently above the required cooking temperature, when the hams are put in, that the load of cold hams may reduce the temperature to the desired degree after the hams have taken on the heat. Then hold the water at the proper uniform temperature through the entire cooking period. If much ham cooking is done, a thermostat (an automatic controller of temperature) may prove an economy. In large packing houses overflow troughs around the vats are used to catch the fat. Without these the water would need to be skimmed, from time to time. The troughs lead to a catch basin where the fat is separated from the water.

The proper temperature for cooking hams is 160 degrees F.

The length of time to cook any of them depends only on the weight of the individual ham. No matter whether boned or unboned, cook 30 minutes per pound of weight in each ham.

After cooking, hold the hams for two hours at room temperature to cool, drain, and develop color before placing them in the cooler. Some prefer to leave the hams in the cooking water until cold. Those who do should turn off the steam or heat under them an hour before schedule time. But cooling in the broth is bad for the color of

the hams. Those arguing that the hams will reäbsorb their own juices, if left in the cooking water, must not lose sight of the fact that the juices are diluted with the water, and the so-called "broth" or cooking water is hardly calculated to improve the flavor of the ham.

Then chill the hams in a cooler that is kept between 35 and 40 degrees F. When chilled through, carefully remove them from the retainers. Then lightly wash them in lukewarm water, wipe them dry, and so stack them on shelf trucks and frames as to prevent their crushing by other layers and to admit of complete ventilation.

Boiled hams, both boneless and unboned, may be smoked or unsmoked, depending on the demand. They are mostly smoked as directed in the chapter on smoking. Color dipping hams and the practice of cooking hams in colored water to reduce smoke-house shrinkage, are unlawful even when certified color is used. Boneless hams for smoking must be wrapped with twine and provided with a loop for hanging.

Scotch Boneless Hams

These are similar to boneless boiled hams, but they are neither fatted nor boiled.

Use American-cut Freeze-Em-Pickle cured hams as lean as possible, weighing 15 to 18 pounds.

SCOTCH BONELESS HAM

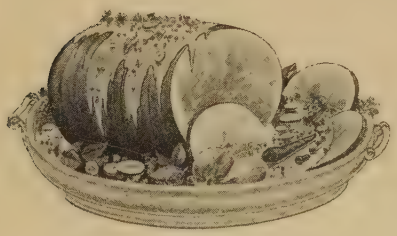
Soak in cool water for several hours.

Then bone them in the manner described for boneless boiled hams, on page 71.

Roll them lengthwise, the skin-side out, and wrap tightly, at intervals of 2 inches, tying a loop at the shank end for hanging.

If they are to be smoked, smoke them in cold smoke till they have a nice light smoke color. If they are not smoked, hang them up to dry at room temperature, they are then ready for sale or shipment. Like Westphalian hams, they are sliced raw.

Strasbourg Boiled Hams



STRASBOURG BOILED HAM

The Strasbourg method of boning and boiling hams is essentially the same as described in the article on boneless boiled hams, page 69, with the following modifications.

Instead of pressing the boned hams in metal retainers, they are merely wrapped in cloths and corded at intervals of 1 to 2 inches before cooking. They are cooked 30 minutes at 160° F., for each pound of weight, in a vegetable broth containing carrots, onions and bay leaves. To obtain distinctive flavor, any available spices and aromatic herbs may be included in the broth. An hour before the hams are completely cooked, the heat can be turned off and they can then be permitted to cool one hour in the broth. However, this is not the method in vogue in Alsace. While it prevents shrinkage, it injures the color of the meat. The Alsatian method of cooling is similar to that used in America, the same as that described for boneless boiled ham.

Whether cooled dry or in their own broth, they are allowed to cool and are then hung in the smoke-house and given a light smoke.

French Ham, Sweet-Pickle Cured

French hams are long-cut lean hams, like Italian hams.

Pump and cure them like regular American (short-cut) sweet-pickle hams with this difference: French hams are highly spiced and small sacks of spices and aromatic herbs should be soaked over night in hot water which is then cooled and used in the pumping and curing pickle. The sacks of soaked spices and herbs are then suspended both in the pumping pickle and in the curing pickle. Use our Zanzibar-Brand Corned Beef Seasoning.

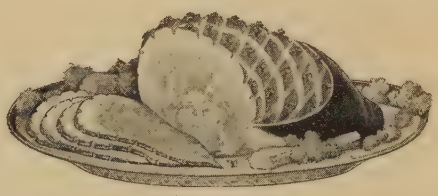
FRENCH HAM, S-P CURED

When duly soaked to remove excess salt, the hams are smoked. Starting with medium heat without smoke, it will take about 5 hours to dry the hams. Then start smoke and slowly reduce

the temperature to a cool smoke and smoke until the hams have a nice smoke color.

If bleached meat is desired, the Freeze-Em-Pickle must be omitted from the formula. They are then known as **Parisian White Hams,** which are rather insipid in taste and lack the flavor which the Freeze-Em-Pickle cure would produce.

Baked Hams



BAKED HAM

By far the most delectable thing to tempt the eye and palate, is baked ham. Take medium weight. Freeze-Em-Pickle cured, boiled ham, skin the back, neatly slash the fat, decorate it with whole cloves, and brown it in the oven. Few passers will fail at least to cast a wistful glance at it.

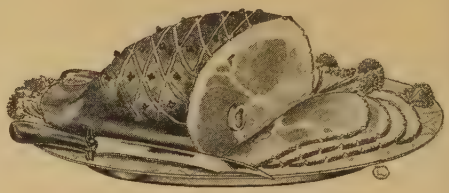
First—The best baked hams are usually cooked without boning them, but can be boned, if so desired, just as for regular boneless boiled ham. Sort the cured hams, not into averages but into lots divided to the pound.

Second.—Cook them at 160 degrees F., 25 minutes for each pound of weight in a ham.

Third.—After they are boiled, remove the skin from the fat and score them by cutting in straight parallel lines, half through the fat only, about 1 to 1½ inches between cuts. Then swing the ham around, one quarter turn, and cut straight, parallel lines, 1 to 1½ inches apart, half through the fat only, square across the first cuts to form squares, or diagonally to form "diamond" shapes.

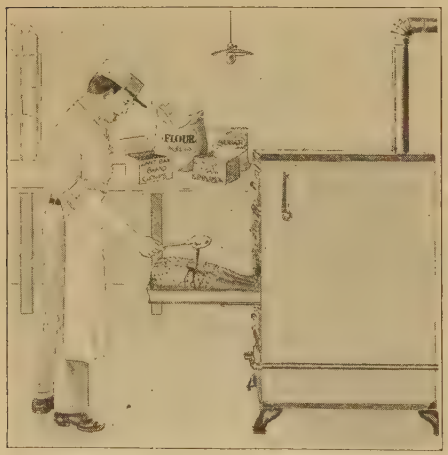
Fourth.—Decorate the hams with whole cloves and cassia buds, put them into individual baking tins and coat them well with common brown sugar that has been cooked to a thick sirup in vinegar. Put the tins into a bake oven, and bake slowly till nicely browned.

Fifth.—Cool at ordinary room temperature, basting the hams from time to time till cooled, with the melted fat and sirup in the bottom of the baking tins. While this adds to the cost of the boiled hams, the increased salability and higher selling price make them worth the extra effort.



BAKED UNSKINNED HAM

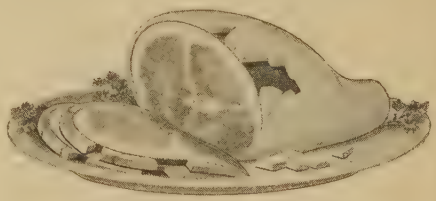
Another method is to take fancy Freeze-Em-Pickle cured hams (unskinned) directly from the curing vats, soak them as if for smoking, score the outer side through skin and half the fat only, and bake till cooked through, at a temperature of 325 degrees F. about 20 minutes per pound of weight. Smithfield or Old-Virginia-style hams are sometimes so baked without boiling. Cool the hams on tables and cover with cloth while cooling. They are ready for use when cooled.



BAKING SMITHFIELD (VIRGINIA) HAMS

Another method is to take a boiled ham (the bones in) and pull off the skin while still hot. Make a thin paste of flour with equal parts of water and vinegar, adding a little finely ground cinnamon. Spread this paste over the ham, decorate with whole cloves, and bake till brown. This is a method used for Smithfield or Old-Virginia-style hams that are first boiled.

To bake hams in jackets, take Freeze-Em-Pickle sugar-cured hams, soak them to remove excess salt, and drain. Make a thick paste of flour and cold water, using 2 lbs. of flour to a medium size ham, and roll the ham in it to cover it completely. Bake in a medium hot oven (about 325 degrees F.), 20 minutes for each pound of ham. Cool in the jacket to retain the moisture. The browned jacket can be left on or it may be trimmed off together with the skin. The skinned ham can then be covered with bread crumbs and brown sugar and returned to the oven till nicely browned.



BAKED HAM IN "JACKET"

Grease that is left in ham baking pans, when not baked in jackets,

can be sold to the bakery trade as baked-ham grease and should bring practically the same price as lard.

Do not hold baked hams in the ice box below 50 degrees F. as that would tend to bleach them.

Directions for Curing Sweet-Pickle Bellies

S. P. Clear Bacon Bellies

Bellies may be rib bellies or clear bellies, depending on whether the ribs are left on or cut off for spare ribs. The clear bellies are graded for quality to make fancy bacon bellies, cured in boxes by the Freeze-Em-Pickle process; or regular bacon bellies, sweet-pickle cured for the lighter average sizes and dry salt cured for the heavier averages.

Pumping is not necessary for the averages which go into pickle cure unless one wishes to rush the cure.

PACKING S. P. BELLIES

The curing pickle for sweet-pickle bacon bellies is made as follows:

For each 100 pounds of bellies, use	**8 pounds common salt,** **1 pound Freeze-Em-Pickle,** **2 pounds best granulated sugar,** **6 gallons cold water.**
Or for each 100 gallons of cold water, use	**133 pounds common salt,** **17 pounds Freeze-Em-Pickle,** **33 pounds best granulated sugar.**

These will test out about 70 degrees on the salimeter or brine tester at curing temperature.

To put down in tierces, block up one side of a clean tierce to tilt it sufficiently for convenient and better packing. If possible, place bellies of one average in a tierce. Place the bellies on end, the long way up and down (vertically), the flat side resting against the sides of the tierce. When filled to the opposite staves, fill in the open spaces on both sides of the first pile. Thus the bottom layer is completed with the bellies on end. Then fill in the upper layer by placing the bellies on their side edges (horizontally), the flat side again resting against the staves or sides of the tierce.

About 285 pounds will be packed in a standard tierce, requiring about 17 gallons of pickle. Weight down with a clean board, sufficiently to hold the bellies in place when the pickle is poured in. The packing should be so standardized that the 17 gallons of pickle will cover the top of the "heading" board or grate.

To put down bellies in vats, follow the general directions on pages 62-64. Lay the bellies flat, skin-side down, except the top layer; turn that skin-side up. As a rule 1300 to 1400 pounds are packed in a vat. A practiced hand can throw the bellies into the vat without special effort at precise spacing. Yet, sufficient care must be exercised to fill the vat to a point where 78 to 84 gallons of pickle will cover the bellies and the "heading". Dents and disfigurements due to pressure, one upon another, need cause no uneasiness, as they disappear during the smoking.

The length of time to cure sweet-pickle bacon bellies by the Freeze-Em-Pickle process, differs according to the green weight of the bellies as follows:

Light Bellies, 4 to 8 pounds, cure 11 to 15 days,
Medium Bellies, 9 to 12 pounds, cure 16 to 21 days,
Heavy Bellies, 13 to 16 pounds, cure 22 to 24 days.

The following schedule adapts the usual packing-house averages to the Freeze-Em-Pickle process.

S. P. Clear Bacon Bellies (Green Weight)	Age When Fully Cured
4 to 6 pound average,	12 days,
6 to 8 pound average,	14 to 15 days,
8 to 10 pound average,	15 to 17 days,
10 to 12 pound average,	16 to 21 days,
12 to 14 pound average,	21 to 23 days,
14 to 16 pound average,	23 to 24 days,
(Rarely) 16 to 18 pound average,	24 to 26 days.

For the home market, especially in cool climate, the shorter time is sufficient.

Overhaul on the third, sixth and tenth days after putting down. Thus the light averages receive the same number of overhaulings as the heavier. The method is similar to that for all pickle-cured meats, as described on pages 63-64.

Before smoking, soak in cold water, 5 minutes for each day the bellies have been in cure, and wash in warm water before hanging up to smoke.

Sweet-Pickle Rib Bellies

Rib bellies are the same as clear bellies except that the sheet of spare-ribs is left in. Their treatment, too, is the same, except that it is advisable to pump them.

They range in weight between 6 and 12 pounds and are divided, in wholesale trade, into three averages:

Small S. P. rib bellies, 6 to 8 pounds,
Medium S. P. rib bellies, 8 to 10 pounds,
Large S. P. rib bellies, 10 to 12 pounds.

Pumping directions (for rib bellies).—If the pickle pump used has a dial to indicate the quantity pumped at each stroke, then set it to deliver 3 ounces. Use fancy Freeze-Em-Pickle pumping pickle: see formula, page 56.

At the shoulder end, for all averages, make one insertion of the needle, giving two strokes of the pump handle. The face of the belly is pumped only in the medium and heavy averages—one insertion for the medium, two for the heavy. Give only one stroke to each insertion in the face of the belly.

In this way the quantity of pumping pickle to be forced into each S. P. rib belly is as follows:

Small, pump 6 ounces pumping pickle,
Medium, pump 9 ounces pumping pickle,
Large, pump 12 ounces pumping pickle.

Keep them in cure for the same length of time as S. P. clear bacon bellies of the same weight, on preceding page. Overhaul in the same way too.

Narrow Strips

Narrow strips are the belly side of split bellies. They occur in one average only—5 to 7 pounds.

They are usually sweet-pickle cured in the same manner as S. P. clear bacon bellies of the same weight. However, if dry cured in boxes with our Freeze-Em-Pickle, a much better bacon is produced.

The upper side of split bellies is known as back strip, which should always be cured by the Freeze-Em-Pickle dry cure in boxes.

A—BACK STRIP
B—NARROW STRIP

Shoulders

N. Y. SHOULDER

There are two general classes of shoulders, English-cut or square shoulders and American-cut.

The American-cut are of two kinds—picnics or calas, and New York shoulders. The packers cure also English square-cut shoulders, for domestic use as well as for export. Skinned picnics and scalped picnics have a recognized place; but where skinning or scalping is necessary, for any reason, the picnics may also be sold green for roasts and not cured.

SQUARE SHOULDER

Picnics or Calas

Picnics were formerly known as picnic hams and California hams, gradually simplified to "picnics" and "calas," to avoid the charge of misbranding. "Picnics" is more favored to designate shoulders trimmed to resemble a ham with butt off.

For smoking they are pumped, sweet-pickle cured, and smoked like short-cut (American-cut) hams.

First sort picnics into three classes:

Small picnics, 3 to 6 pounds,
Medium picnics, 7 to 10 pounds,
Large picnics, 11 to 16 pounds.

PICNIC OR CALA

Pumping Picnics.—If the curing temperature is kept uniformly between 36 and 40 degrees F., small and medium picnics are sometimes cured without pumping. It is safer, however, to pump them all: it improves their flavor and saves time in curing. If they are not pumped, the length of time in cure should be extended accordingly.

Use the Freeze-Em-Pickle fancy pumping pickle. See formula on page 56.

The accompanying diagram shows the position of the pumping needle at the four "stitches" (insertions) given to heavy picnics—two into the shank, shown at "a" and "b"; one in the blood vein, shown at "c"; and one in the butt, under the blade, shown at "d". This last one is omitted in pumping light and medium picnics. Solid lines in the diagram show the pumping needle up to the point of entry into the picnic, and dotted lines show the direction of the needle inside the picnics.

WHERE TO INSERT THE PUMPING NEEDLE IN PICNICS OR CALAS

If the pickle pump is equipped with a gauge or dial, set it for fancy picnics, to deliver 3 ounces fancy Freeze-Em-Pickle, pumping pickle at each stroke of the pump handle. Allow one stroke for each insertion of the pumping needle. For medium and large picnics, allow two strokes for the insertion in the shank, but only one stroke for the rest.

The quantity of pumping pickle forced into each picnic in this way is as follows:

Small picnics, pump 6 ounces pumping pickle,
Medium picnics, pump 9 ounces pumping pickle,
Large picnics, pump 12 ounces pumping pickle.

The manner of putting down picnics in cure is the same as that described for hams.

Overhaul on the fifth, tenth and fifteenth days of curing.

The length of time to cure sweet-pickle picnics or calas, by the Freeze-Em-Pickle process, when duly pumped, differs according to the size of the picnics or calas, as follows:

Small picnics, cure 15 to 20 days,
Medium picnics, cure 22 to 28 days,
Large picnics, cure 30 to 38 days.

The following schedule adapts the usual packing-house averages to the Freeze-Em-Pickle process:

S. P. Calas or Picnics (Green, Weight)	Age when Fully Cured
3 to 5 pound average,	15 days,
5 to 6 pound average,	19 days,
6 to 8 pound average,	23 days,
8 to 10 pound average,	26 days,
10 to 12 pound average,	30 days,
12 to 14 pound average,	34 days,
14 to 16 pound average,	38 days,

For the home market and for boiling, the picnics may be taken

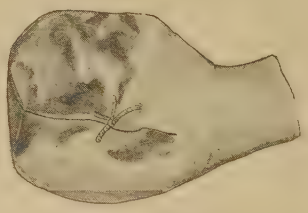
out of the cure earlier, the same as hams for boiling. It is not well to leave them in the pickle more than five days after they are fully cured, unless they are removed to a temperature of not over 28 degrees F.

Smoking picnics is treated in the separate chapter on Smoking.

Boneless Boiled Picnics

SITUATION OF BONES IN PICNICS OR CALAS

Picnics with fine-grained meat, smooth, thin skin, Freeze - Em - Pickle cured, and weighing 12 to 18 pounds, can be made into boneless boiled picnics, fully equal to the flavor of fancy boiled hams.



HALF-BONED PICNIC (CALA) THE SHANK BONE IN

After curing the picnics, soak, bone and sort them for weight to the pound or even to the half pound. Then roll, press, cook, chill, and perhaps smoke them, in precisely the same manner as boneless boiled hams of the same weight. See particulars on pages 69 to 73. A little Zanzibar-Brand Savory Jell-Jell scattered in the cuts made by boning, before pressing the shoulder, makes the boiled product slice better and gives it a delightful flavor.

Baked Shoulders

Freeze-Em-Pickle cured, fancy boiling shoulders can be baked, with or without jacket, by any of the methods described for baked hams on pages 75 to 77.

New York Shoulders

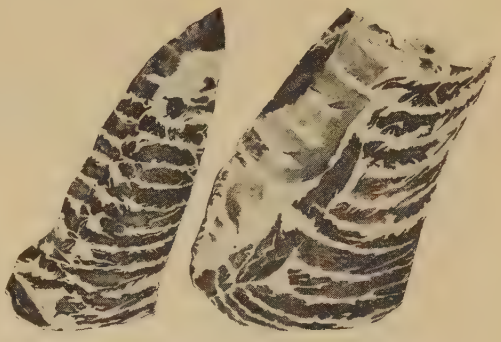
New York shoulders are shoulders trimmed "butt-on," which weigh from 10 to 14 pounds, rarely more.

They should be pumped, Freeze-Em-Pickle cured in brine, overhauled, soaked, and smoked like picnics or calas of the same weight.

Sweet-Pickle Spare Ribs

For each 100 pounds of spare ribs make a brine as follows:

8 pounds salt,
1 pound Freeze-Em-Pickle,
2 pounds granulated sugar,
6 gallons cold water.



SPARE RIBS
HALF SHEET FULL SHEET

Cure in this brine from 8 to 10 days for smoking. The temperature of the cooler in which the spare ribs are cured may be anywhere from 36 to 43 degrees F. and it should not vary from this range. A temperature of 38 to 40 degrees is best where refrigeration can be regulated. It is best to leave the spare ribs in the cure 10 days for smoking, though they will be satisfactorily cured in 5 to 6 days for eating out of pickle.

If the above method is carefully carried out, the result will be a fine, mild, sweet cure, and not too salty.

Before placing the spare ribs in brine, it was the custom formerly to rub the ribs in one-half of the above quantity of salt, Freeze--Em-Pickle, and sugar: any that was left after rubbing was added to the remaining one-half of the ingredients and used for making the brine. This is the older method of pickle curing; but as the dry curing agents are largely washed off by the pickle and then lie undissolved in the bottom of the container, modern practice is to dissolve all in the water at once and then throw the spare ribs into the brine. If the spare ribs are first piled into the container and the brine poured over them, they should be overhauled once or twice so as to get the pickle on all parts of the spare ribs.

Freeze-Em-Pickle Dry Cure

in Closed Containers

Fancy Breakfast Bacon

The reputation of some of our largest packers has been built up, mainly, on their HIGH QUALITY BREAKFAST BACON. In this chapter we give the details of the process. By curing bacon according to the method here outlined, the most appetizing, finest flavored, and, in fact, the most perfect bacon possible will be produced.

The process is known as the Freeze-Em-Pickle dry cure in boxes, which we originated. Bacon cured according to this process will bring the highest possible price. The lean part has the tempting cherry red of fresh meat, much finer than can be obtained by other methods, and the fat is firm and crisp. The flavor of the bacon is much superior to pickle-cured bacon.

The work attached to curing bacon under this formula is reduced to the minimum. One of the great advantages of curing bacon by this method lies in the fact that the bacon does not need to be overhauled or handled after it is put down in the curing box.

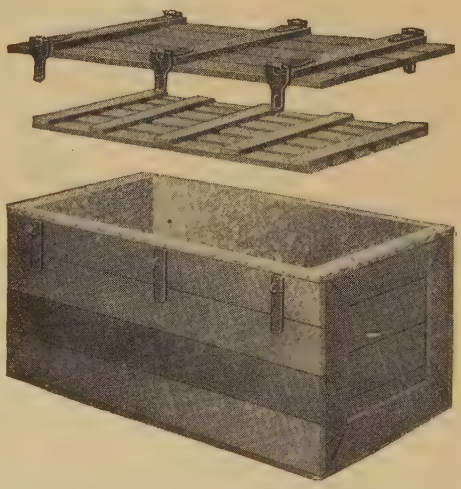
This process is worked out on scientific principles. The bacon will not become too salty, even though it remains in the cure for months after it is fully cured. If the bacon is not needed when cured and one wishes to hold it over for one, two or three months, or even longer, which often is the case on account of market conditions, this can be done. The flavor will then be just as delicious and just as perfect as when taken out at an earlier date—superior to other methods of curing. Here is where another great advantage comes in. Simply let it lie in the boxes until you want to smoke it. It will not be any saltier than when smoked as soon as it is fully cured.

The results obtained from the Freeze-Em-Pickle dry-cure box process will surprise one, whether he has been accustomed to using

a brine cure or a dry-salt cure. Many packers have tried dry-curing methods without a great deal of success; but the Freeze-Em-Pickle box cure opens their eyes to the possibilities of perfect dry curing. In either the brine cure or the floor cure, it is necessary to use more salt than is actually needed to cure the meat. As a result, if the meat is left in the brine or salt too long, it continues to absorb more salt and draw the albumen and flavor out of the bacon until it is unfit to eat. We repeat that the Freeze-Em-Pickle dry-cure process in boxes offers the real secret of success in bacon curing.

The boxes used may hold 100 pounds, 200 pounds, or even as much as 500 pounds and over. The size of box depends upon the quantity of this finer class of bacon one wishes to make. In the small plant the small boxes are usually the easiest to handle. The size of bacon handled will determine the size of box in which such bacon packs best without waste of space.

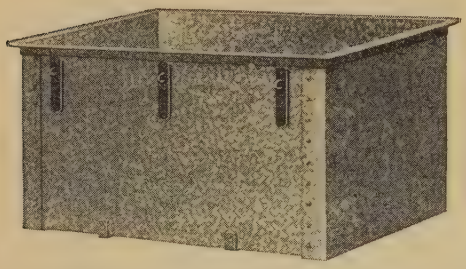
The wooden boxes are made of heavy material, well nailed, and sometimes bolted together. They are then lined with zinc or galvanized iron and soldered at the seams to make them watertight. If a heavier galvanized stock is used, the wooden outer box is not necessary.



CONSTRUCTION OF THE WOODEN BOX, LINED WITH GALVANIZED IRON, AND THE LOOSE RACK AND COVER

The covers for these boxes are of wood and should be so made that they can be pressed down tightly and maintain a continual pressure on the bacon. Some packers press the covers down with jack screws; others weight them down with stones, barrels of water or other weights equal to the weight of the bacon in the box. After the bacon has been sufficiently compressed, the covers can be fastened by means of the hasps shown in the illustrations.

The under side of the covers may have hardwood strips or slats nailed to it, properly spaced so as to hold the moisture and melted salt which form over the top layer, as a result of the pressure, until they are reäbsorbed by the meat. Loose strips can be laid on the bacon to serve this purpose; but much the best method is to have



HOW THE CURING BOX CAN BE MADE OF HEAVY GALVANIZED IRON. THE RACK AND COVER OF WOOD, AS FOR THE WOODEN BOX

a separate rack or heading loosely fitting the inside measurements of the box lining. This is laid over the top layer of bacon. If the meat then does not fill the box to the top, blocks or strips of wood can be placed between the rack and cover to fill the vacant space.

In that way pressure can be brought to bear on the meat to exclude air.

Select bellies from any size hogs. Bellies weighing anywhere from 3 to 40 pounds each have been successfully cured and held by the Freeze-Em-Pickle box cure process and command a premium when so cured. But for finest results, be careful when making selections not to pick seedy bellies. Select only the choicest with nice, smooth skin. Flatten and then trim each piece carefully, making square ends and sides. Do not leave too much flank fat on this bacon.

Be sure the bacon is thoroughly chilled before putting it into cure. If not sure, spread it on racks in the cooler and leave it there for 24 hours longer to remove every trace of animal heat and to make the meat firm and solid.

Formula for the Freeze-Em-Pickle Dry Cure in Boxes

For 100 pounds of bellies of any size, use
- 1 pound Freeze-Em-Pickle,
- 1 to 2 pounds granulated sugar, according to flavor desired,
- 2 pounds fine dairy salt,

Total, 4 to 5 pounds.

First weigh the bacon you expect to pack.

Then weigh off the Freeze-Em-Pickle, granulated sugar, and dairy salt needed to cure that much bacon, and mix it thoroughly. For a beginner, it is very necessary that he count the pieces of bacon which are to go into the box and divide the curing mixture into as many parts. For example, if in 100 pounds to be packed there are 14 pieces, weigh out the quantity for 100 pounds of bacon and divide the mixture into 14 parts. Heavier pieces should be allotted a larger portion than light pieces packed with them.

A parchment or wax-paper lining can be put into the box if there is any objection to curing in contact with zinc or galvanized iron.

Rub each piece of bacon over all the surface with its portion of the curing mixture, on the rind side as well as the flesh side, using up the entire portion on the piece of bacon. Pack this into the box, skin-side down. Fit each piece in carefully to fill the box in flat layers and tamp down each layer with a tamper as solidly as possible, leaving no vacant spaces or air pockets to discolor the fat. Fill in the air spaces between the bacon with pork or beef trimmings that have been mixed with the proper proportion of the curing mixture. This will keep all the juices evenly divided. Put in the top layer of bacon, skin-side up.

Heavy bacon needs more time to cure than light bacon. It is better, therefore, to pack pieces of light weight separately from the heavy. However, no great harm is done by packing different sizes together, except that light pieces will be somewhat saltier than the heavy if all are left in cure till the heaviest are fully cured.

After packing the bacon, put the rack in place over the bacon and the cover over that. If the rack is too low to allow compression of the bacon after the cover is weighted down, blocks or boards must fill in between the rack and the cover until the cover is free above the sides of the box. This will admit of compression. If the meat is properly pressed, it will come out of cure in nicer shape.

In weighting down the top it is necessary to use some judgment and not press the bacon too heavily. Building up tiers of two boxes provides more than enough weight for the lower box, for the upper tier must still be weighted down. Stones, cement blocks, railroad iron or barrels of water can be used for this. The barrels must be perfectly water tight. They can be put on empty and filled with a hose, syphoning out the water again when the bacon is to be used.

The right temperature for curing Freeze-Em-Pickle dry-cured bacon in boxes is the same as for curing in brine: namely, between 38 and 40 degrees F. Those not having artificial refrigeration and

using ice for cooling, may find it hard to prevent the temperature sometimes going as high as 45 degrees and even higher. Bacon can be cured with Freeze-Em-Pickle at this temperature, but the best results are obtained at the lower temperatures.

Do not overhaul. In other curing methods it is necessary to repack at intervals to obtain an even cure. Not so in the Freeze-Em-Pickle dry cure in boxes. The bacon is left undisturbed until cured to the desired extent or until fully cured under the following schedule.

The length of time to cure fancy breakfast bacon by the Freeze-Em-Pickle dry cure in boxes differs according to the size of the bellies, as follows:

Weight of bellies (For dry cure in boxes)	Number of days in cure
3 to 5 pound size,	11 days,
6 to 8 pound size,	14 days,
9 to 11 pound size,	19 days,
12 to 14 pound size,	22 days,
15 to 17 pound size,	25 days.

The following schedule adapts the usual packing-house averages to the Freeze-Em-Pickle process.

Weight of bellies	Cured age
3 to 5 pound average,	11 days,
5 to 7 pound average,	13 days,
6 to 8 pound average,	14 days,
7 to 9 pound average,	15 days,
9 to 11 pound average,	19 days,
11 to 13 pound average,	21 days,
13 to 15 pound average,	23 days.

Before smoking, remove the bacon from the box and soak in cold water, 5 minutes for each day it has been in cure. Then dip it momentarily into water held at 140 to 150 degrees F., just long enough to scrub it quickly with a brush. This will remove the albuminous matter from the surface of the rind and give the bacon a beautiful appearance after it is smoked. Smoking fancy breakfast bacon is fully treated in the chapter on Smoking.

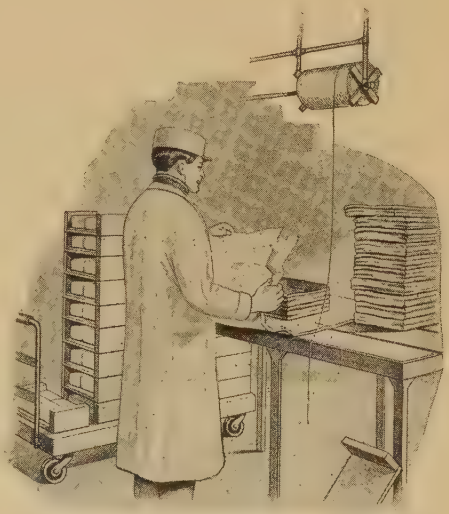
How to Handle Surplus Fancy Bacon Bellies

At times when more hogs are offered than the market can use profitably, especially in December and January, freeze the surplus fancy bacon bellies green, store them and take them out as needed for cure in the manner of the foregoing. About one-third of the bellies of the winter kill of the large packing houses is cured as soon as they come from the cutting room: the other two-thirds are frozen and stored in the frozen state. They are taken out of the frozen

storage, thawed out, cured and smoked only as needed.

The best way is to wrap the green bellies securely in moisture-proof paper before going into storage. That prevents evaporation and "freezer-burn" and keeps the meat nicer.

Wrap the bellies, two to four in each bundle, in two sheets of parchment paper. Tie each bundle securely, once around the long way and twice around the narrow way. Lay these bundles side-by-side in racks. The racks are flat broad trays with a cross piece nailed at each end to hold the next rack with sufficient clearance above the bundles for air movement.

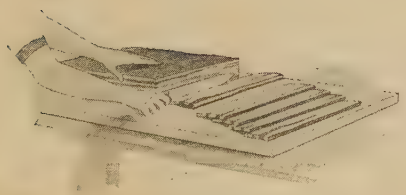


PACKING GREEN BELLIES FOR FREEZING

Pile the racks in the sharp freezer, at 5 to 10 degrees below zero F., permitting the cold air to circulate between the bundles of bellies and freeze them for a period of 48 hours, which is the usual length of time taken for sharp freezing meats. Slow freezing at higher temperature ruptures the cells of the meat and causes it to decompose more rapidly after thawing out.

Remove the bundles then to cold storage temperature of 12 to 15 degrees F. and stack them up, without racks, to the ceiling if necessary. Owing to the fact that they are wrapped in bundles of two to four, they are easily separated at curing-cellar temperature to be thawed out as needed for curing.

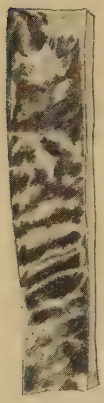
Fancy Slicing Bellies



FANCY SLICING BACON

Bacon bellies that have been skinned to improve their appearance are known as fancy slicing bellies. They occur in the wholesale trade in averages of 6 to 14 pounds. They are Freeze-Em-Pickle dry-cured in boxes like fancy breakfast bacon of the same weight. See pages 85 to 89.

Fancy Back Strips

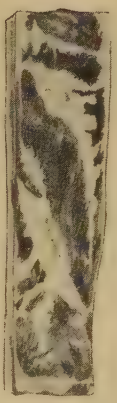


BACK STRIP

Back strips are the upper side of split bellies. They occur in the wholesale trade in only one average, weighing 5 to 7 pounds, green.

They should be Freeze-Em-Pickle dry-cured in boxes, like fancy breakfast bacon. They are cured in 15 days.

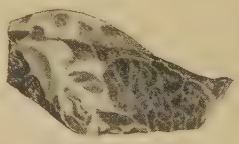
The lower or belly side of split bellies is known as **Narrow Strips.** They may be sweet-pickle cured; but, if dry cured in boxes by the Freeze-Em-Pickle process, a much better bacon is produced.



NARROW STRIP

Boneless (Pork) Shoulder Butts

Boneless Shoulder Butts are usually Freeze-Em-Pickle dry-cured in boxes, with or without spices. They are most profitably used to make Capicolla or rolled boneless butts, stuffed into beef bungs.



BONELESS SHOULDER BUTT

Boneless shoulder butts may also be sweet-pickle cured and smoked like hams. They are then known as cottage butts.

How to Make Fancy Bacon Squares out of Jowls

BACON SQUARE CUT OUT OF JOWL

The best returns for jowls are received when they are trimmed square, Freeze-Em-Pickle dry-cured in boxes and smoked like fancy breakfast bacon. Sell them then as fancy bacon squares. Cure the trimmings in the same way to make them firm and hard and cut them into small cubes to be mixed with ground meats in smoked sausages.

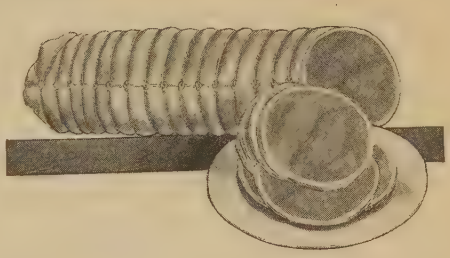
Fancy Clear Pork Brisket

The brisket is a strip cut from the forward end of bellies to reduce their weight or length. When cut from rough or heavy pork, it averages 4 pounds and is salt brined as barrel pork. When cut from fancy bacon bellies, it is known as fancy clear pork brisket. The average green weight is 1½ to 2½ pounds.

They should be Freeze-Em-Pickle dry-cured, either in boxes or in tierces, taking 9 to 10 days to cure. When properly cured, washed and smoked like fancy breakfast bacon, it is a dainty morsel for which there is always ready demand.

Rolled Pork Loin or Dewey Roll and Lachs Schinken

Use boneless pork loins, Freeze-Em-Pickle cured. For Dewey roll (sometimes known as Dewey ham), wrap them with twine, smoke and cook them. For Lachs Schinken, stuff them into beef bungs, wrap them with twine, smoke them and serve uncooked.



DEWEY ROLL OR COOKED LOIN ROLL

To make a most delicious Dewey roll or Lachs Schinken, they should be dry-cured with Freeze-Em-Pickle in boxes or tierces. For Lachs Schinken the sweet-pickle cure was originally used and that method is described under the head of Lachs Schinken in the sausage section. The F. E. P. dry-cure in boxes is less troublesome and gives better results and less shrinkage.

First.—When completely chilled through, bone out uncured pork loins and trim off surplus fat.

Second.—Roll the loins in the following dry mixture, well mixed, or rub it onto all sides. To make sure of getting the right quantity on the meat, divide the mixture into as many equal portions as there are loins in the 100 pounds. Then apply one of the portions to each loin:

For 100 pounds of boned pork loins of any size, use

- 1 pound Freeze-Em-Pickle,
- 1 to 2 pounds granulated sugar, according to the flavor desired,
- 2 pounds dry salt.

Total, 4 to 5 pounds.

Then pack the loins in layers, in clean boxes or tierces, placing

each loin on edge and tamping down tightly to exclude air. Weight down with rack and cover as in packing fancy breakfast bacon.

The loins are not overhauled in this method of curing.

They are fully cured at 20 to 25 days; but they can be kept for two months without placing them in a low temperature. If they are to be kept longer than that, place them (boxes and all) in a temperature below freezing point.

Third.—Select the cured boneless pork loins in pairs of equal size. Place them together, bone-side touching and the shoulder end of one against the hip end of the other, and fasten them together, at the two ends, by tying 3-ply No. 24 seine twine around them.

HAND WRAPPING BONELESS PORK LOIN

In wrapping by hand, tie again at the middle and then midway between those, making five ties to hold the loins in place for the actual wrapping which follows. Wrap with the same size twine, making loops ½-inch apart, with double slip hitch knot. Start at one end and work to the middle, and then start at the other end and work to the middle again, drawing each loop tight and securely fastening the ends of the twine.

Cut this loin roll at the middle to make two Dewey rolls or Lachs Schinken. Form a 3-inch loop at the small end of each, to hang on sticks for smoking, using seine twine strung through the loins at about 2 inches from the end.

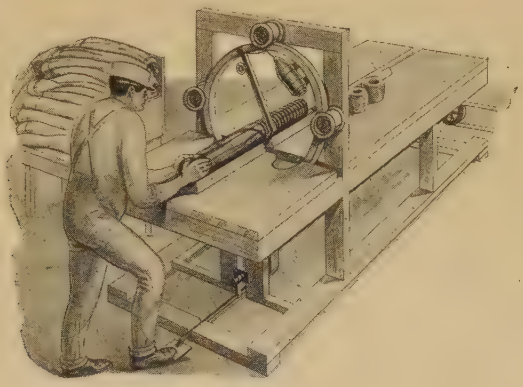
In wrapping by machine, first tie the loins together by hand at the ends: then wrap continuously from one end to the other, the loops ½ inch or any optional distance apart.

Fourth.—Hang the rolled pork loins in the smokehouse and give them a cool smoke for about 4½ hours or until the proper color is attained.

If intended for Lachs Schinken, sell them raw as soon as cooled through. If intended for Dewey roll, first cook them in water.

Cook Dewey rolls three hours at 160 degrees F.

After cooking, hold Dewey rolls two hours, at room temperature, to drain and develop color before chilling. Then hold twelve hours in the cooler to chill and set thoroughly.



MACHINE WRAPPING BONELESS PORK LOIN

Cured, Smoked and Dried Pork Loins

Known Also as "Canadian Bacon" and "Smoked Rib Back"

Take rib backs, weighing not over 8 pounds, consisting of the loin and fat back, with the backbone removed. The back ribs in these backs usually are obtained from sides that have had three ribs or English shoulders removed and therefore have no blade bone on the shoulder end. The rump part or flank is also removed.

Cure the boneless pork loins according to directions on page 91. When cured, hang up for a week in a dry room, at a temperature of 48 to 56 degrees F., to dry. When sufficiently dried, sew them up in cheese cloth, hang them in the smoke house and give them a cold smoke.

These smoked loins are eaten raw but can be cooked or fried. When properly dried they are most delicious eating.

For those who like garlic, add garlic in the cure, the quantity depending on the taste. With garlic these loins taste like the finest smoked goose meat.

Dry-Salt Cure in Open Packs

In the old method of dry-salting meat, the moisture is drawn out of the meat by the curing agents, is dissolved and drained off, leaving the meats drier and harder and leaving the flavor more or less brackish (salty). The Freeze-Em-Pickle dry-salt process overcomes this to the extent that this process coagulates the albumin and retains the meat juices.

The meats lie on floors or racks, uncovered and exposed to possible rats and mice in this process. It is important, therefore, that the building (especially the curing cellars) be made rat-proof. Concrete floors with top dressing of cement are sanitary, easily cleaned and drained, and a protection from rats and mice. Outside, these pests should be destroyed by means of Heller's $1000.00 Guaranteed Rat and Mouse Killer. Unless this is done, they will slip in through open doors. Not only can they destroy or damage much meat, but they are carriers of disease and a reflection on the efficiency of the butcher and packer.

Pump the Dry-Salt Meats

Among successful curers, all lean meats and heavy meats streaked with lean are pumped, no matter what curing process is used.

The pumping pickle used in the Freeze-Em-Pickle dry-salt process is made without sugar.

Make the Dry-Salt pumping pickle for Dry-Salt Meats as follows:

1 pound Freeze-Em-Pickle,
2 pounds salt,
1 gallon cold water.

Completely dissolved, this will test about 101 degrees on the salimeter, at curing cellar temperature.

All animal heat must be chilled out of the meat before pumping, particularly in the bones and in the thickest part of the meat.

The quantity of pumping pickle to pump into dry-salt cured meat can be governed by the packer. In some sections the meats are pumped much heavier than in others. Do not pump too much as the excess of brine will only drain out and wash the dry-salt mixture from the meat. But give it all the pumping it will hold, about one ounce per pound of meat. Have the pumping pickle, if possible, between 35 and 40 degrees F. when pumped into the meat.

How to Salt Down the Meats in the Dry-Salt Cure

First dip the chilled meats in full strength salt brine testing 100 degrees on the salimeter. This will cause the dry-salt and Freeze-Em-Pickle to cling better to the meat when rubbed on. If the meat is pumped it will be wet enough without dipping for the salt and Freeze-Em-Pickle to stick.

After dipping or after pumping, apply the following:

Dry-Salt Curing Mixture

For 100 pounds dry-salt meats, use	**1 pound Freeze-Em-Pickle, 5 pounds salt.**
Total,	**6 pounds.**

Practice enables the curer to apply the salt and Freeze-Em-Pickle mixture in approximately the right quantity without scales or measure. The beginner should weigh off the quantity needed for 100 pounds and divide it into as many equal piles as there are meat cuts of equal weight in 100 pounds. For example, it takes four bellies of 25 pounds average to make 100 pounds. The 6 pounds of mixture should therefore be divided into four equal piles. One entire pile is then rubbbed on each of the four bellies, coating all parts thoroughly, giving particular attention to see that the inside of pockets from which bones have been removed is well covered.

In the large packing house where the volume of business permits it, the dry-salt cuts should be placed on an endless moving table, which runs first through a vat of 100-degree salt brine and then over a vat of dry-salt and Freeze-Em-Pickle. The meat should pass between men who rub the right quantity of the salt and Freeze-Em-Pickle on it with a sweep of both hands.

Pile all dry-salt meat on racks—in large operations, on clean, drained floors. Lay them skin-side down throughout. Build smooth piles, with straight, perpendicular sides, level and of equal height so that the pressure may be equalized in all parts of the piles. Plaster the top and sides of the piles with salt to exclude air. Avoid making piles unnecessarily high. When over 3 feet high, the excessive

weight causes undue shrinkage in the lower layers. If the piles are larger than can be taken out of cure at one time, do not spread a layer over the entire space, but build up to the desired height at one side of the space and so gradually complete to the opposite side. In this way, the oldest can be overhauled or taken out of cure first.

A ticket on each pile should give the lot number, the average in the lot, the total weight of the lot, the date of going down, and the date the pile was completed. Space should be left on the ticket to inscribe later the date of each overhauling.

How to Overhaul Dry-Salt Pork

Overhauling is as necessary in the dry-salt cure in open packs as in the sweet-pickle cure. All dry-salt pork should be overhauled three times during the curing period.

First overhauling, 5 days after putting down,
Second overhauling, 10 days after first putting down,
Third overhauling, 20 days after first putting down.

Light-weight meats that are fully cured in less time than that, need not get all three overhaulings.

It is advisable to pump dry-salt meats again at the first overhauling, though they can also be pumped at each overhauling after that if desired.

To force the cure, pump at each overhauling and overhaul on the fifth, tenth and fifteenth days.

As the meats are taken up for overhauling, toss (beat) them on a grating over a bin to catch the used salt. Then put them through a dip tub of 100 degree full strength salt brine, unless they are pumped: in that event, the pumping leaves the meats wet enough for salting.

Then salt in the same manner as when first putting down. See that the meat is well covered with the salt and Freeze-Em-Pickle mixture, using clean second mixture (re-used mixture) on overhauling, adding enough fresh mixture to provide 6 pounds for every 100 pounds of meat. Put down in packs again as at first and again plaster the top and sides of the pack with damp salt to exclude the air,

All D. S. meats held in the regular cellar temperature of 38 to 40 degrees F. longer than 30 days, should be overhauled at that age and at 30-day intervals after that until used or removed to cold storage. If the temperature goes higher than 40 degrees, the need of overhauling at 30-day intervals is even more imperative. If this is faithfully done, dry-salt meats can be held indefinitely.

Fully Cured Age of Dry-Salt Meats

For meats that are TO BE SMOKED:
If the cuts weigh 18 pounds or less, cure 1½ days per pound.
If the cuts weigh over 18 pounds, cure 2 days per pound.

For meats that are NOT TO BE SMOKED:
If the cuts weigh 18 pounds or less, cure 1 day per pound.
If the cuts weigh over 18 pounds, cure 1½ days per pound.

Soak Dry-Salt Meats Before Smoking

Before putting dry-salt meat of any kind into the smoke-house, soak it 3 to 5 days in No. 2 ham pickle diluted with water to test only 25 degrees on the salimeter. No. 2 ham pickle is the sweet pickle remaining after fancy sweet-pickle-cured hams have been removed from it. It is described on page 68. If necessary, the dry-salt cured meats can be left in this diluted pickle as much as ten days before smoking. By doing this, the smoked bellies or sides will have a much finer flavor.

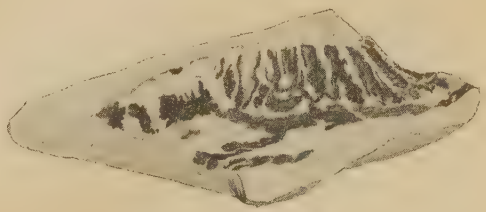
Dry-Salt Bellies

D. S. bellies are obtained from short rib sides by cutting off the back. They are not as closely trimmed as sweet-pickle bellies and may be either rib bellies or clear bellies.

D. S. rib bellies.—To cure them by the Freeze-Em-Pickle dry-salt process, pump them with the dry-salt pumping pickle using one ounce per pound of meat (formula, page 94). Then use the dry-salt formula given on page 95.

D. S. RIB BELLY

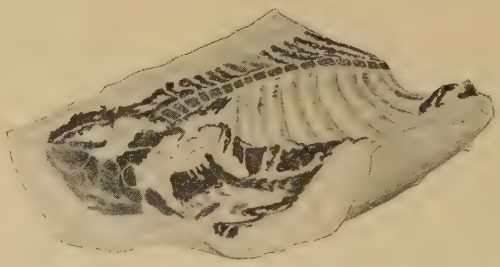
D. S. clear bellies are cut in the same manner as rib bellies, but the ribs are removed. Pump them in the same manner as D. S. rib bellies.



D. S. CLEAR BELLY

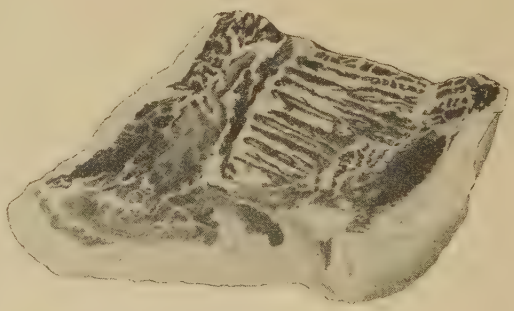
Dry-Salt Sides

D. S. short rib sides are made by splitting the hog through the back bone. The hams and shoulders are cut off and the tenderloin is removed. Pump them with the dry-salt pumping pickle (formula, page 94), using 1 ounce to the pound of meat. Then use the dry-salt formula and directions on pages 94 to 97.

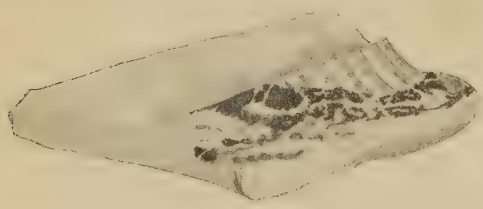


D. S. SHORT RIB SIDE

D. S. short clear sides are similar to short rib sides, except that the back bone and ribs are cut out. Pump them and cure them like short rib sides of the same weight.



D. S. SHORT CLEAR SIDE

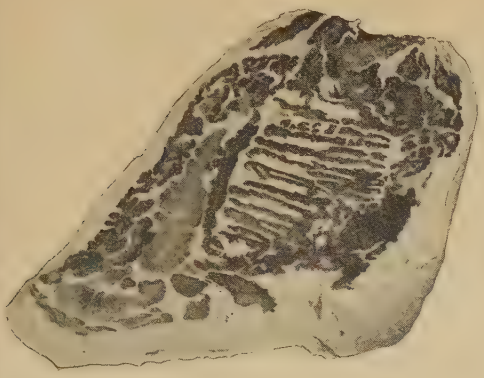


D. S. EXTRA SHORT RIB SIDE

D. S. extra short rib sides are similar to regular short rib sides, except that they have the loin cut out. Pump them with the dry-salt pumping pickle (formula, page 94), using 1 ounce per pound of meat. Then use the dry-salt formula and directions on pages 94 to 97.

D. S. EXTRA SHORT CLEAR SIDE

D. S. extra short clear sides are similar to extra short rib sides, but they have the ribs cut out. Pump them and cure them like extra short rib sides.



D. S. LONG CLEAR SIDE

D. S. long clear sides are square-cut at both ends, neck off; back-bone, shoulder bones, and ribs out; other bones cut even with face of side. Pump them with the dry-salt pumping pickle (formula, page 94), using 1 ounce per pound of meat. Then cure them according to the dry-salt formula and directions on pages 94 to 97.

Dry-Salt Backs

ENGLISH RIB BACK

English rib backs are made by cutting off the loin with the fat, from square-cut short rib sides. Pump them with the dry-salt pumping pickle (formula, page 94), using 1 ounce per pound of meat, and use the dry-salt formula and directions on pages 94 to 97.

D. S. short clear backs are obtained from square-cut short clear sides from which the bellies have been cut, back bone and ribs out, the lean left on, the tail bone sawed off at the face of the meat. Pump them with dry-salt pumping pickle (formula, page 94), using 1 ounce per pound of meat. Then use the dry-salt formula and directions on pages 94 to 97.

D. S. SHORT CLEAR BACK

Rough backs are cut from short rib sides, leaving the bellies. All bones are left in. They are usually cut into pieces for the barrel pork cure. When cured whole by the dry-salt process, use the dry-salt formula and directions on pages 94 to 97. Pump an ounce of dry-salt pumping pickle into them (formula, page 94) for each pound of weight.

ROUGH BACK

FAT BACK OR "SPECK"

Fat backs are cut from the bellies of well fattened hogs, the loins with all the lean being taken off. A handy knife especially for this is formed somewhat like a cooper's drawing knife. The fat backs should be split from the bellies with parallel lines: keystone shapes should be avoided. Bevel the edges moderately and, without mutilating the back, remove any lean remaining on the fat backs.

Fat backs are not pumped. Simply rub them with Freeze-Em-Pickle dry-salt mixture, formula and directions on pages 94 to 97. Backs so cured will be firm and hard. They can be used for cutting into small cubes to be mixed with ground meats in certain smoked sausages.

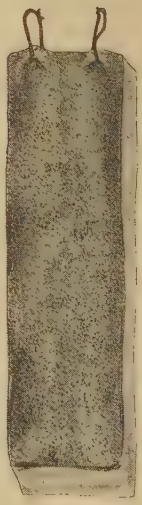
"Pfefferspeck"

(Peppered Fat Back)

First.—Wash the salt from fat backs and soak them in cold water, 5 minutes for each day they have been in cure. Then hang them on bacon hangers (comb hangers) or use a needle and twine to string them and hang them on smoke sticks to drain.

Second.—Smoke them about 10 hours in a cool smoke (about 90 degrees F., if possible).

Third.—Rub ground red pepper on the entire surface of the smoked fat backs, let them hang a while at workroom temperature, and then put them into the cooler or ice box held at about 40 to 45 degrees F. till chilled before packing or selling as pfefferspeck.



"PFEFFERSPECK" OR PEPPERED BACK FAT

Regular Dry-Salt Shoulders, With Butt

N. Y. SHOULDER

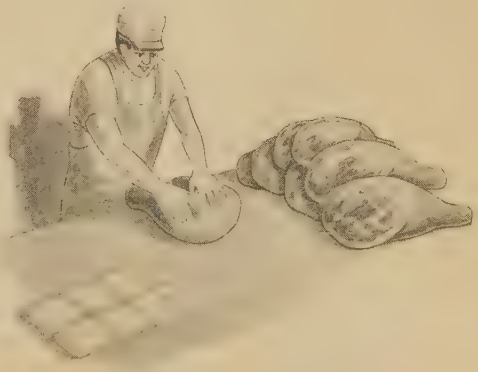
Regular shoulders, with butt, also known as New York shoulders, are long-cut, with the shoulder butt left on, the neck bone and ribs taken out, the neck squared, and the foot cut off at or about the knee. Some packers sweet-pickle cure them and some use the dry-salt cure. For the dry-salt cure, pump them in the shank, in the blood vein, and under the shoulder blade, with an ounce of the dry-salt pumping pickle per pound of meat (formula, page 94). Then use the dry-salt formula and directions on pages 95 to 97.

REGULAR LONG-CUT HAM

Regular Long-Cut Hams

Long-cut hams are lean, long hams, trimmed but not faced, the butt end left full to give them a flat, lean appearance. They average between 10 and 20 pounds and are usually dry-salt cured. Pump them with dry-salt pumping pickle (formula, page 94), inserting the pumping needle in the shank, in the stifle, and in the loin. Allow about 1 ounce of pumping pickle per pound of ham. Then use the dry-salt formula and directions on pages 95 to 97.

Smithfield (Old Virginia) Hams



SALTING DOWN VIRGINIA HAMS

Smithfield hams, also known as old Virginia hams, are spiced and dry-cured. Select lean, long-cut hams. First prepare the following

Freeze-Em-Pickle Pumping Brine for Smithfield and Virginia Hams:

2½ pounds Freeze-Em-Pickle,
11½ pounds dry salt,
1 pound best granulated sugar,
4 ounces black pepper, ground,
4 ounces bay leaves,
5 gallons water.

Place the black pepper and bay leaves in a cloth sack and boil in a half gallon of the water for one hour in the evening. Let it soak and cool over night and then use this water with the remaining 4½ gallons to make the pumping pickle.

When the hams are chilled through and the pumping pickle cooled down to curing temperature, pump into the hams one ounce to each pound of ham.

Then dust the following mixture over the face, butt, and shank end of the hams and rub it in well; that is, over all but the rind.

For 100 pounds of hams, use { 1 pound Freeze-Em-Pickle, 2 pounds sugar, 4 ounces finely ground black pepper.

Until one learns just the right quantity to use for each ham, it is well to weigh the hams to see how many it takes to make 100 pounds. Divide the mixture of Freeze-Em-Pickle, sugar, and pepper into as many equal parts as there are hams in 100 pounds and use one of these parts for each ham.

Pack the hams closely together on a clean, drained floor. As each layer is put down, sprinkle fine dairy salt onto all sides of each ham and then fill all the air spaces between the hams with salt. Handle carefully so as not to rub off the Freeze-Em-Pickle that was first put on. Cover the completed pile with salt so that the hams are really buried in salt and plaster salt over the sides of the pile. Do not make the piles over 3 feet high.

Keep the curing temperature between 38 and 40 degrees F., if possible. But a temperature of anywhere between 38 to 45 degrees will cure the meat.

On the 5th day it is necessary to overhaul the hams, rubbing each ham and covering as at first putting down, but not pumping again. It is not necessary to overhaul again after that.

Allow two days in cure for each pound of weight: thus a 14-pound ham remains 28 days in the pack. When taking off any of the hams, make sure that those remaining are completely covered with salt.

Next soak for four hours in cold water, and then wash off with hot water. Dip in molasses and wipe it off with the bare hands so as to leave a thin film to close the pores. Then rub the entire surface

with ground black pepper. Under the old method, it was necessary to hang the hams in a cold smoke 30 to 40 days. With the Freeze-Em-Pickle process it will be found that a much shorter time is sufficient. Time and shrinkage are saved and the flavor is much improved by this process.

Italian-Style Hams

Italian-style hams are long-cut, lean hams of medium weight. Trim them closely on the cushion side, like American or short-cut hams. Trim the flank closely on the face of the ham and round it nicely. Remove the hip bone or aitch, separating it at the stifle, without mutilating the ham. Saw off the feet through the joint back of the dew claw or "small toe". The finest Italian hams are produced with the Freeze-Em-Pickle press cure.

ITALIAN-STYLE HAM

Pump Italian-style hams with the Fancy Pumping Pickle given on page 65. Pump one ounce to each pound of ham, in the shank, stifle and blood vein.

The hams are then put into ordinary dry-salt packs with a special curing mixture.

Formula for Dry-Salt Mixture for Italian-style Hams

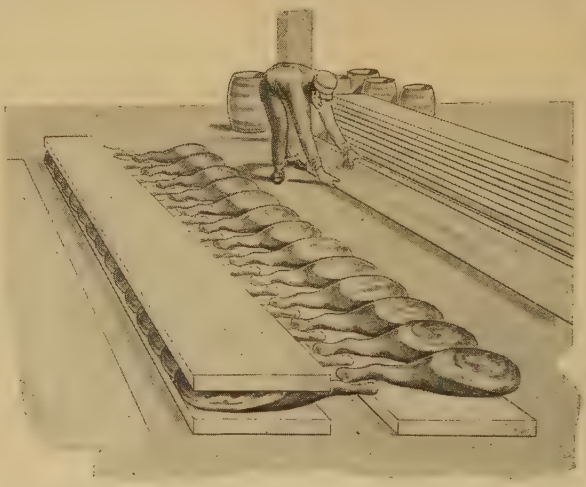
For every 100 pounds of hams, use	3	**pounds dairy salt,**
	1	**pound Freeze-Em-Pickle,**
	2	**pounds granulated sugar,**
	3	**ounces finely ground black pepper,**
	1	**ounce Zanzibar-Brand Chile Powder,**
	½	**ounce Zanzibar-Brand Pure Garlic Powder.**
Total,	**6**	**pounds 4½ ounces.**

Mix thoroughly and divide into as many equal parts as there are hams in 100 pounds. Then rub the surface of each ham with one portion of the dry mixture, especially the face, butt and shank ends, and in the hole from which the aitch or hip bone was removed. Then, without delay, lay them skin-side down, building up packs not more, if it can be avoided, than 3 feet high. All the mixture that remains after rubbing should be sprinkled between the hams. They should be so packed that not more than the specified 6 lbs. 4½ oz. of mixture to the 100 pounds of ham will be needed for rubbing and filling. No vacant air spaces should be left. If any mixture remains when

the pack is completed, use it to plaster the sides and top.

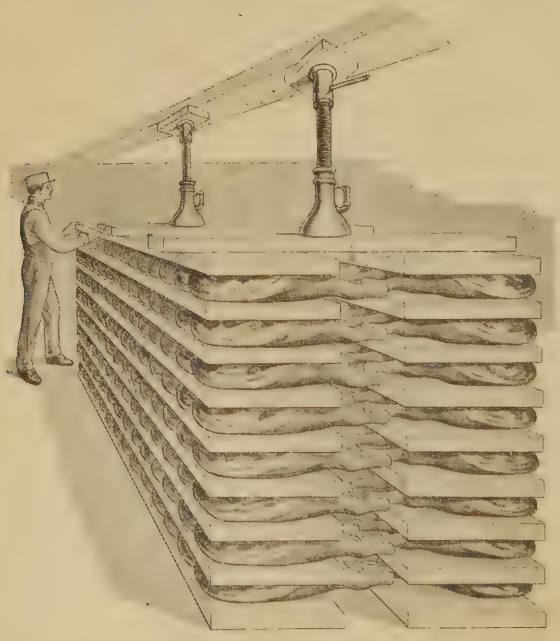
The curing temperature should be kept between 38 and 40 degrees F., if possible.

Overhaul the hams in 10 days by rubbing them with the same quantity of the same mixture as before and then laying them down flat with a board placed over the body of the hams, weighted down with not less than 110 to 125 pounds over each ham. This part of the Freeze-Em-Pickle press cure is to flatten them and give them the characteristic appearance of Italian hams.



PUTTING DOWN ITALIAN HAM FOR PRESSURE

If a large number of these hams is being overhauled, rub them and lay them on clean planks, in a double row 14 feet long. Lay them skin-side down, the shanks dovetailing inward and the butts turned out, making the double row about 3 feet wide, from butt end to butt end. Lay thirteen in one row and fourteen in the other, making twenty-seven hams in a layer. Lay two 2-inch pressboards. 1 foot by 14 feet each, surfaced on all four sides, lengthwise, flat on the body of the hams. No. 1 cotton-wood boards



ITALIAN HAM IN PRESS CURE, USING JACKS

are found to be very satisfactory for this pressing, being cheaper than pine, tasteless and very tough. If they have been used before, thoroughly scrub them first with our Ozo Washing Powder and sterilize them with live steam. Boiling water (212 degrees F.) can be used if steam is not available.

On these pressboards lay another double row of hams and continue to alternate, a layer of hams and the pair of pressboards, until the pile is eight hams high.

Across the topmost pressboards, lay a 3-foot length of timber at both ends of the pile. On these, place a small jack, with a 4 x 4 inch timber extending to the ceiling. Tighten both jacks as much as possible and repeat the tightening every morning for seven days. If jacks are not available, or if the structure of the building does not admit of the jacking, then place heavy weights equal to 3,000 pounds weight on each pile built up as described. Closed barrels of water are a convenient weight for this purpose: they can be put in place empty and both filled and emptied with the aid of hose or they can be rolled onto the pack on skids or inclines.

ITALIAN HAM IN PRESS CURE, USING WATER FOR WEIGHT

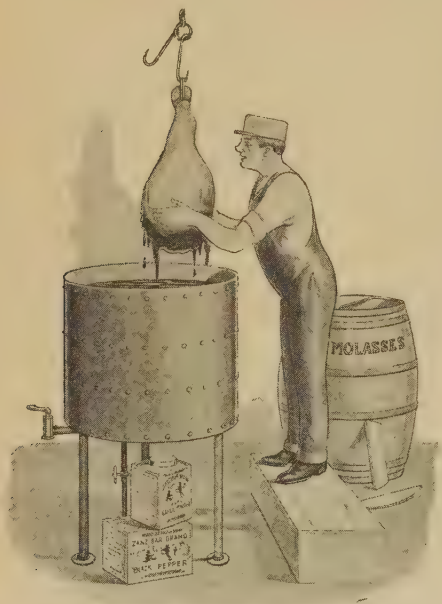
If the hams are put down in vats or boxes, the manner of pressing them should be essentially the same.

The length of time to cure with the Freeze-Em-Pickle press cure is 50 to 55 days: that is, 10 days in the salt pack and 40 to 45 days between press boards.

Then wash the hams well with a fibre brush in cold water, soak them in cold water for three hours, and scrub again with a fibre brush in warm water before hanging them up to dry.

After washing and soaking, the hams are strung. Use twine, 24 inches long. Tie the ends of the twine together, wrap it once around

the shank at the hock joint, and hang them up. Then scrape the skin well with a bell scraper and wipe the entire ham with cloth wrung out of hot water. Let them hang two or three hours to dry.



MOLASSES DIPPING ITALIAN HAM

Prepare a dipping mixture of molasses and black pepper. Dilute New Orleans molasses with water to the consistency of cream. Add one pound finely ground black pepper and 2 ounces Zanzibar Brand Garlic Powder to each dilute gallon of molasses. After drying the hams for two or three hours, dip each one in the peppered molasses and wipe off the coating again with the bare hands. This fills the pores and glazes the hams over with a thin film of molasses and pepper, which little more than colors them.

Dry the molasses-dipped hams in the smokehouse, without smoke, for ten days, at a temperature of not less than 95 degrees F. This is usually done by using either steam pipes or gas, and not sawdust or wood. Charcoal may be used where neither steam nor gas is available. After thorough drying in the smoke-house, hang the hams to dry further at room temperature for 48 hours longer.

Then pack the hams tightly as possible in hard-wood clean tierces, head them up air tight, and store them in a dry atmosphere, at a temperature just above freezing.

As the hams are needed, open the tierces and smoke the hams in the smokehouse, for 12 hours, at a temperature of 100 to 105 degrees F. Some prefer to dry them without smoke, simply using low heat.

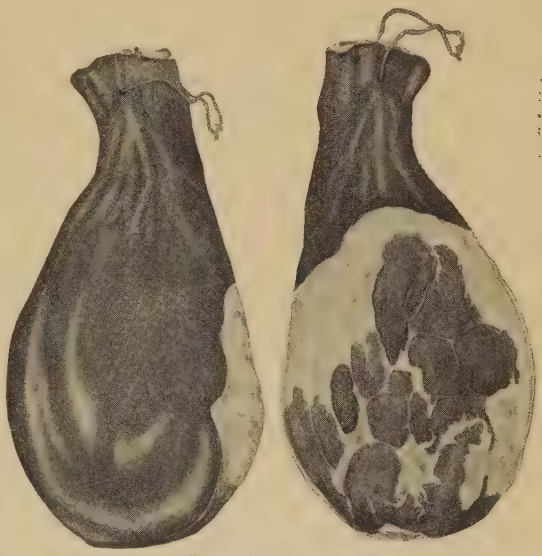
When wrapping for shipment, it is a good idea to sprinkle well with pepper the face and butt of the hams and especially to get pepper into the opening from which the aitch bone was removed. Most Italian-style hams are shipped in white canvas unless otherwise ordered. A good method of wrapping consists of a sheet of muslin

on the face of the ham, extending over the butt; then a 32-inch sheet of glassine paper; the whole incased in the canvas wrapper with suitable label pasted on the back.

The keeping quality of the ham, surface-hardened by the drying, is increased threefold by the sealing film of molasses and pepper. The ham should keep a year, even in warm climate.

Westphalian Ham

Westphalian ham is cut with butt on, the hip bone cut out, cured in a combination of the dry cure and the pickle cure, thoroughly smoked, and sliced raw.



WESTPHALIAN HAMS

Pump the hams according to the formula on page 94. Then salt them down on racks or clean drained floor, using the following mixture:

For 100 pounds of hams, use
- 1 pound Freeze-Em-Pickle,
- 5 pounds dairy salt.

Overhaul and resalt in 7 days.

Take up the hams in 14 days from the time of first salting them down. Then put them down in tierces with the regular ham curing brine, made as follows:

For 100 pounds of hams, use
- 8 pounds common salt,
- 1 pound Freeze-Em-Pickle,
- 2 pounds best granulated sugar,
- 6 gallons cold water.

Omit the sugar if the hams are to be kept a long time.

Overhaul on the fifth and tenth days after putting into pickle.

Take out of pickle as follows:

12 to 14 pound hams, in 10 days.
15 to 17 pound hams, in 17 days,
18 to 20 pound hams, in 24 days,
21 to 24 pound hams, in 31 days.

Scrub the cured hams in lukewarm water and then soak them for a period of 4 to 8 hours, in cold tap water. Let them hang to dry a few hours and then hang them in a medium warm smoke-house till a shining red brown or chestnut color is acquired. If beech wood and saw dust are available, they will impart the characteristic Westphalian flavor.

Alsatian Farmer Hams

Select long-cut hams of medium weight and pump them with the following special

Alsatian Farmer-Ham Pumping Pickle

1 pound Freeze-Em-Pickle,
2 pounds dry salt,
1 pound best granulated sugar,
2 ounces ground coriander,
1 ounce ground allspice,
2 ounces ground black pepper,
¼ ounce Zanzibar-Brand Pure Garlic Powder,
1 gallon water.

Put the coriander, allspice, pepper and Garlic Powder into a muslin sack, pour 1 gallon boiling water over it and then let it stand covered to soak and cool over night. Then dry the contents of the sack and save them for use in the "Dry-Salt Formula for Alsatian-Style Farmer Ham". Use the gallon of flavored water to dissolve the Freeze-Em-Pickle, salt and sugar.

Pump the hams, using 1 ounce of the pumping pickle per pound of ham. Into a 16-pound ham pump 16 ounces of pumping pickle.

The hams are then put into dry-salt mixture.

Dry-Salt Formula for Alsatian Farmer Hams

For every 100 pounds of hams, use
3 pounds dairy salt,
1 pound Freeze-Em-Pickle,
2 pounds granulated sugar,
Dried ground spices saved from the "Alsatian-style Farmer-Ham Pumping Pickle".

Mix thoroughly. Count the number of hams per 100 pounds and divide the dry-salt mixture into as many parts as there are hams in the 100 pounds. Rub the surface of each ham with one portion of the dry mixture.

Pack these hams closely in tierces or other available containers. Any of the mixture left over must be used to fill empty air spaces and to cover the hams. Another pound of salt per 100 pounds can

be added, if the temperature at which the hams are to be cured is not favorable.

Overhaul on the fifth, tenth, and fifteenth days after putting down. Use clean second mixture (reüsed mixture) adding enough fresh mixture to provide the 6 pounds per 100 needed to cover each ham at overhauling and to fill the air spaces.

While curing, the hams should be kept in a temperature at 36 to 40 degrees F.

They are fully cured in 20 to 30 days, according to the size of hams; but they can be left in cure for sixty days without further overhauling, provided they were overhauled according to the above schedule.

Soak twenty-four hours in cold water before smoking.

Smoke two to three days over a very cool smoke. Then hang the hams in a cool, dry, airy, well-screened room to dry. The more moisture is dried out, the longer will the hams "keep".

Barrel Pork Cure

Pumping Barrel Pork.—All meat cured with bones in—no matter if it is sweet-pickled, dry cured, or barrel-pork cured—should be pumped before it is put into cure.

For barrel-pork pumping pickle,

1 pound Freeze-Em-Pickle,
2 pounds salt,
1 gallon water.

Pump 1 ounce of pickle per pound of meat. If the pickle pump has a gauge for measuring and controlling the quantity pumped at each stroke, set it at 3 ounces. Pump the meat before it is cut and then cut it into pieces weighing about 5 pounds each.

To put down barrel pork into cure, the meat may be packed directly into the barrels in which it is marketed, or it may be cured in vats and then repacked into barrels.

In the barrel cure, scatter a small handful of dry Freeze-Em-Pickle between cuts of lean meat, such as

Ham butt,
Brisket pork,
Mess pork,
Lean end (rib bellies, chopped),
Long clear pork.

Use 2 pounds of Freeze-Em-Pickle to the barrel. If cuts without lean are packed, do not use Freeze-Em-Pickle, but scatter instead a handful of dairy salt over each piece.

Head up tightly and fill the barrels, through the bung hole, with 80-degree salt brine. Then bung up. Overhaul by rolling on the fifth, fifteenth and thirtieth days after putting down. The meat is sufficiently cured for local use in 15 days and fully cured for all purposes in 30 days.

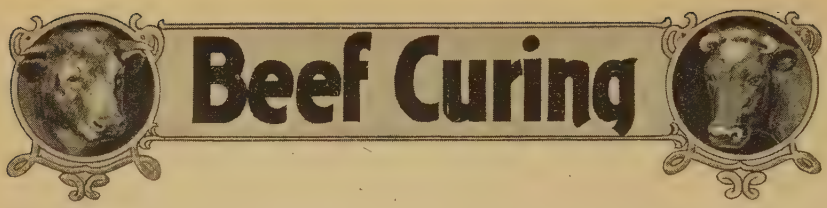
Meats cured in barrels for shipping should be capped with 40 pounds rock salt per barrel. Distribute the salt well around the meat when packing.

In the vat cure, scatter a small handful of dry Freeze-Em-Pickle between cuts of lean meat, such as

Regular plates, trimmed,
Ham butt,
Pig,
Rough butt,
Prime mess.

Use 1 pound of Freeze-Em-Pickle to the 100 pounds of meat in the vat. For cuts without lean, use only dairy salt instead. Fasten the rack in the top or weight down lightly after adding enough 80-degree plain salt brine to cover. Overhaul by repacking on the fifth, tenth, and fifteenth days after first putting down. In 20 days this meat is ready for use, and is fully cured in 30 days.

Storage pork is stored at a temperature of 24 to 26 degrees F., after it is fully cured. It should be transferred to cold storage after 60 days of curing if it is to be kept for a long time.



Curing Corned Beef in the Retail Market

Few butchers realize the importance of building up a reputation on good corned beef. A good trade on corned beef enables the dealer to get higher prices for plates, rumps, briskets, and other cuts which otherwise would have to be sold at a sacrifice. Corned beef cured by the Freeze-Em-Pickle process will have a delicious corned beef flavor, a fine red, cured-meat color, and will not be too salty.

To obtain the best results in curing corned beef, it is always advisable first to soak the meat for a few hours in a tub of fresh cold water to which a few handfuls of salt have been added. This will draw out the blood which would otherwise get into the brine. The membrane of the inside of the plates and flanks should be removed and the strip of gristle cut off the edge of the belly side.

If any part is tainted, moldy, discolored or slimy, it must be trimmed off, that no slimy or tainted parts may get into the brine. If plates or briskets are to be rolled, a small quantity of a mixture of Zanzibar-Brand Corned Beef Seasoning, Freeze-Em-Pickle, sugar and salt should be sprinkled on the inside before rolling them. This gives the meat a delicious flavor, results in a nice red color, and cures it more uniformly and quickly.

Making the Brine for Corned Beef

For 100 pounds plates, rumps, briskets, etc., use

- **5 pounds common salt,**
- **1 pound Freeze-Em-Pickle,**
- **2 pounds granulated sugar,**
- **1 pound Zanzibar-Brand Corned Beef Seasoning,**
- **6 gallons water.**

Cure the meats in this brine 10 to 15 days, according to weight and thickness of the pieces.

The sugar must be pure granulated sugar. Yellow or brown sugar must not be used. When sirup or low-grade sugar is used, the brine is very apt to become thick in two weeks; but when pure granulater sugar is used it will last quite a while, depending largely upon the conditions under which the brine is kept.

Retail butchers who cure corned beef in small quantities and who

take pieces from the brine from day to day and add others, should make the brine and handle corned beef as follows:

To every six gallons of water add five pounds common salt, one pound Freeze-Em-Pickle, and two pounds granulated sugar. In summer, if the temperature of the curing room or cooler cannot be kept down below 45 degrees, use one pound of sugar for six gallons of water; but if the cooler is kept below 40 degrees, use two pounds of sugar. In winter the curing can always be done in a temperature of 40 degrees and then two pounds of sugar to six gallons of water should always be used.

Use two receptacles with two lots of pickle as per formula—one for the fresh meat going in to be cured, and one from which to sell. This makes it possible to cure the meat thoroughly and then to sell the oldest first. It will save complaints and give better satisfaction to customers. A piece of corned beef not thoroughly cured is not a thing to tempt the appetite at the dining room table.

NOTE—Never mix fresh meat with cured or partly cured, as it is difficult to distinguish the youngest meat from the oldest.

Seasoning Corned Beef

It is a simple matter to add seasoning to corned beef, but the proportions and correct blending of the right spices and condiments to produce the most desirable flavor require a highly developed sense of taste, good judgment and long experience.

There are many butchers who could greatly improve their corned beef if they knew more about the proper seasoning and the proportions to use. We have worked out this problem for them in our special Zanzibar-Brand Corned Beef Seasoning. It is an excellent blend of various spices and condiments best suited for seasoning corned beef. It imparts a most zestful, appetizing flavor.

Zanzibar-Brand Corned Beef Seasoning should be added as follows: for every 100 pounds of cured beef take 1 pound of the seasoning, put it into a small muslin sack, tie the ends, and boil it two hours in two quarts of water taken out of the six gallons the formula calls for. Allow it to cool; then add the contents, liquid and all, to the pickle without opening the sack. Stir it thoroughly. This will give a most delightful flavor to the brine, and the corned beef will be seasoned thoroughly while acquiring a uniform cure. The meat does not come in contact with any loose spice and has a fresh clean appearance.

Garlic Flavored Corned Beef

Many people like garlic flavor in corned beef, and butchers who want to please their customers should keep a supply of corned beef both with and without the garlic flavor. We make a special preparation known as Zanzibar-Brand Garlic Compound, to enable butchers to give a garlic flavor to any kind of meat. It has none of the objectionable features that result from the use of fresh garlic.

Zanzibar-Brand Garlic Compound is a powder which we manufacture out of selected garlic. The flavor given by it is delicious and the advantages gained with it will be thoroughly appreciated by all who use it.

How to Know When Corned Beef Is Not Fully Cured

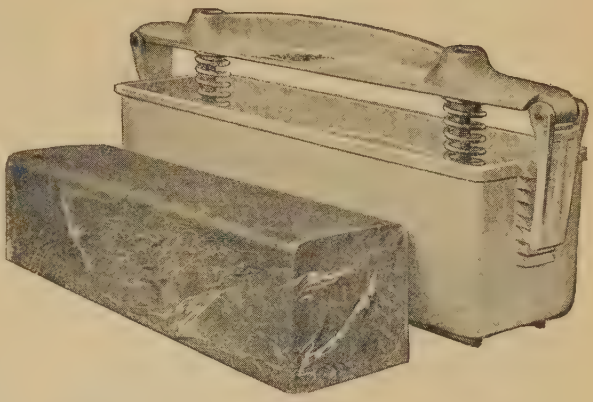
If a piece of corned beef is cut, before or after it is cooked, and the inside is not a nice red color, it is because the meat is not cured through. It is often sold in this condition, but it should not be, as it has not the proper flavor unless it has been cured all the way through, which requires two or three weeks in a mild brine, depending upon the size of the piece of meat. Corned beef pickled four or five days in a strong brine, with an excessive quantity of saltpeter in it, as some butchers cure it, is not good corned beef and has not the proper flavor, although it may be red through to the center, the color being due to the large quantity of saltpeter used in the brine.

The Freeze-Em-Pickle process of curing gives the meat a different and better flavor.

Pumping Corned Beef

We recommend pumping corned beef with a pickle pump before it is put into the brine. In this way the meat is cured in one-fifth less time—cured from the inside as well as from the outside—and uniform in color throughout. If corned beef is pumped, it should be pumped with fancy pumping pickle, formula for which is given on page 65. The pieces of corned beef should be pumped at two to four places, according to the size of the piece of meat. One will soon become accustomed to it, after pumping a few pieces. Pumping can, of course, be overdone, and too much brine must not be pumped into the meat, otherwise it will swell too much and become spongy.

Directions for Cooking Corned Beef in Presses



PRESS-COOKED CORNED BEEF WITH PRESS

Take fully cured corned beef, cut it into different sizes, and pack it nicely into a press for cooked corned beef. All butchers' supply houses sell presses made especially for this purpose. After packing the pieces of meat into the press, force the cover down tightly. Then put the press, which has been filled, into hot water, at a temperature of 180 degrees F., in which Zanzibar-Brand Corned Beef Seasoning has first been suspended long enough to flavor the water, and leave the corned beef there for one and one-half hours. A very large press may require three hours' cooking before the meat is cooked through. After the meat is thoroughly cooked, place the press in the cooler and let it remain there over night. The following morning the corned beef will be thoroughly chilled and may be taken out of the press.

In the summer it is a good plan to dip the loaf of cooked corned beef, after it is removed from the press, into hot lard for a second, or even hot tallow. Dipping will coat it so as to prevent its becoming moldy and will tend to keep it better.

Press-cooked corned beef is a superior article. It is a good seller and very often women would eagerly buy this from the butcher, willing to pay good prices for it, if they could only obtain it. Butchers should give more attention to preparations of this kind, as they would help greatly to develop business. This is a good way of working off plates and flanks profitably.

Cooked Jellied Pressed Corned Beef

This may be prepared in any suitable quantity, according to capacity and demand. Soak the corned beef for two hours in cold water to make sure it is not too salty. Cook in just sufficient water to keep it covered from two and a half to three hours, or until tender, according to the size of the pieces of meat, at a temperature not

higher than 170 degrees F. While cooking, place in the cooking water a bag with the required proportion of Zanzibar-Brand Corned Beef Seasoning. Use one pound to every one hundred pounds of meat or one-quarter pound to every twenty-five pounds of meat.

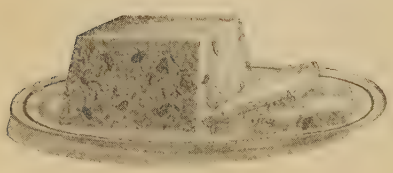
JELLIED CORNED BEEF

Remove all skin and bones. Then pack it into oblong tin pans, similar to those used for veal loaf. Fill the pans full, pressing it down slightly so as not to have too many air spaces. Take as much of the water in which the corned beef was cooked as will fill all the air spaces or interstices between the meat and add one ounce of Zanzibar-Brand Savory Jell-Jell to every pint of the water to thicken it. Then pour the jelly stock over the corned beef in the pans, while hot, enough to fill all the spaces between the meat and to force the jelly stock over the sides when the corned beef is pressed down. Then place a piece of white pine board on the top, cut to fit snugly in the top of the pan. Place weights on it to hold the meat together and allow it to cool and set. When cold place the pans in a cooler or refrigerator. When chilled loosen up with a knife at the ends and it will slide out a solid block of meat, still stuck to the white pine board. It is then ready for slicing. This formula makes an attractive article and a good seller.

Jellied corned beef should be cooked in a jacket kettle or in a double oatmeal boiler so as to cook it with as little water as possible without burning the meat.

Note.—All small pieces and cuts of lean beef can be cured for jellied corned beef. If weather conditions and temperature do not permit it to set firmly enough, use more Zanzibar-Brand Savory Jell-Jell. It should be just strong enough to set firmly.

Corned Beef Jelly



10 pounds fresh hog skins or calf-feet,
30 pounds corned beef (Freeze-Em-Pickle cured).

First.—Take 10 lbs. of hog skins or calf feet, pour boiling water over them, thoroughly removing all hair.

Second.—When the skins or feet are clean, place them in a jacketed kettle over fire, add one quart of water to every pound and cook them two or three hours, until they are very tender and all the gelatin has been extracted into the water. Do not cook them in a kettle into which live steam blows or the jelly will become too thin. Cook at a temperature between 160 and 195 degrees F. The lower the temperature the better the jelling quality of the extract. That part of the gelatin which can be extracted only at high temperatures tends to thin the extractives of low temperatures.

Third.—Then separate the soup or jelly water from the skins or feet and skim off any of the fat that may come to the top. Some desire to have a clear jelly. The jelly that is obtained from rinds is turbid or milky. To clarify it, use to every quart of jelly the whites of three eggs. The jelly must be lukewarm so that it is in a liquid form, but not boiling, when the whites of the eggs are added, and they should be thoroughly beaten and mixed with the jelly. Then bring the whole mass to boiling point, after which filter through a filter cloth or double thickness of muslin. The whites of the eggs congeal and collect all the residue in the jelly and it remains in the straining cloth so that when the jelly becomes cold it will be perfectly clear. If it is desired to make this jelly firmer, add ¾ lb. Zanzibar-Brand Savory Jell-Jell, soaking the Jell-Jell in cold water until it is mushy. Then mix it with the soup jelly while it is still hot and stir until the Jell-Jell is dissolved. This will make a very firm jelly.

Fourth.—Cook the corned beef slowly, from two to three hours, until it is tender.

Fifth.—When the meat is cooked, cut it by hand with a knife into slices so that it can be packed nicely into the pans.

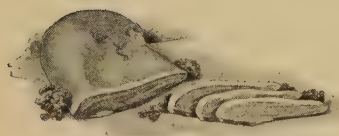
Sixth.—Take pans similar to bread tins or any other size desired and pour a quantity of hot jelly into them. Then pack the cooked corned beef into the pans, filling the layers evenly with hot jelly as it is being packed. See that jelly is in all the interstices or unfilled spaces and between all layers of meat. Use sufficient of the jelly to fill the containers to the brim. Place a clean board that fits into the pan over the meat, with a weight on it to press the meat down.

Seventh.—Let the finished product cool for two hours: then place it in a cooler or refrigerator. Be sure to let it cool in a perfectly dry place as it must be kept away from moisture. The next day it will be ready for sale, either with pan or turned out of it.

The cooked skins and the meat on the calf feet can be used in making headcheese or liver sausage.

Curing Boneless Brisket Corned Beef

Packing-House Practice



BONELESS BRISKET CORNED BEEF

Sort the briskets into averages corresponding to the grade of beef, as light pieces are cured in shorter time than heavy pieces.

Pump each piece, at the rate of an ounce of pumping pickle to the pound of weight, using the fancy pumping pickle given on page 65.

Pack in open barrels, tierces or vats. Cover completely with pickle which tests about 70 degrees, on the salimeter, at curing temperature. It is made as follows:

Freeze-Em-Pickle Corned-Beef Curing Brine

For 100 pounds of beef briskets use:

- 8 lbs. salt
- 1 lb. Freeze-Em-Pickle,
- 2 lbs. granulated sugar,
- 6 gals. cold water,
- Garlic to suit the taste.

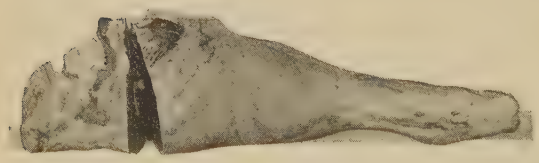
Overhaul: on the third, sixth and ninth days after putting down.

The Length of Time to Cure

		For cooked corned beef intended for immediate use.	For thorough cure and longer keeping.
Small	(5 to 10 pounds)	5 to 10 days,	15 days;
Medium	(11 to 15 pounds)	11 to 15 days,	19 days;
Large	(16 pounds and over)	16 days,	23 days.

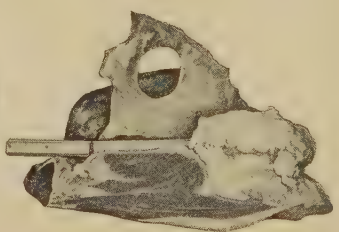
The temperature for curing should be between 38 and 40 degrees F. for best results.

Sugar-Cured Beef Rump Butts



SEPARATING THE RUMP FROM THE ROUND

Handle and cure beef rump butts in the same manner as boneless brisket corned beef.



A STAGE IN THE BONING OF RUMP BUTT

Corned Beef Brisket

With Dry-Salt Rub

A superior mild-cured corned beef can be made of dry-salt-rubbed briskets or other beef if the following directions are followed. First rub with the following dry mixture.

SAWING BRISKET AND PLATE FROM FORE-QUARTER

For each 100 pounds of briskets, use:	2 pounds granulated sugar,	
	1 pound Freeze-Em-Pickle,	
	1 pound salt.	
Total,	4 pounds.	

Get the total weight of the briskets to be cured and count them. Then mix as much of the dry-salt mixture as the total weight of briskets call for. For example: if there are eight briskets weighing 200 pounds, 8 pounds of dry-salt mixture are needed which should be divided into eight equal parts.

A convenient way of dividing the dry-salt mixture is to spread it in a square, flat pile. Take a sharp straight edge, such as a long ruler or piece of tin or a straight knife, and divide the flat pile into eight equal parts, each pile containing the proper quantity for one piece of meat. Pieces larger than the average should have a little more while those which are smaller should take a little less. Practice will enable the curer in time to apply the right proportion of salt mixture to each piece without first portioning it off.

Rub each piece so as to coat it completely on all sides and fill all cuts and pockets in the pieces. If the meat is too dry to hold the salt, dip it momentarily in full-strength salt brine before rubbing. As soon as a piece is rubbed, pack it into the tierce or other curing package, first scattering a handful of the salt mixture over the bottom of the container. Pack the meat in as quickly as possible. Whatever salt mixture is left after rubbing all the pieces, scatter it over the top.

Instead of weighting down the meat with a board and stones, fasten a grating in the top by means of two cleats, one at either side. If the container is not filled to the level of the cleats, hold the grating in place on the meat by means of sticks or props braced against the ceil-

ing. This prevents floating of the meat and consequent washing-out of the salt mixture when the brine is added. Yet it does not weigh down with a continuous pressure that would prevent penetration of the brine between the pieces of meat.

When the meat is properly packed, add 40-degree plain salt brine enough just to cover it, which should take 6 gallons for each 100 pounds of meat. Any more would cause the meat to float, and good results cannot then be expected. When the dry-salt rubbing mixture is dissolved, it will raise the strength of the brine to 55 degrees. If the temperature of the cooler is much above 40 degrees F., it may be well to use a 45-degree plain salt brine. With the dissolved rubbing mixture, the strength of the brine would then be raised to 60 degrees, which is strong enough for any condition likely to be met, when the Freeze-Em-Pickle cure is used.

Overhauling is most important in this cure. Overhaul on the 5th, 10th, and 15th days of the cure, reversing the packing in another container each time and pouring the same (used) brine over it after dissolving any undissolved salt which may be in the bottom.

On the 15th day, at the third overhauling, the small and medium briskets will be fully cured and may be taken out. The large briskets should be left about five days longer in the brine, when they too will be fully cured and ready for cooking.

If a garlic flavor is desired, add fresh garlic or Zanzibar-Brand Pure Garlic powder to the brine. Bay leaves and other spices added to the brine give the corned beef a zestful, spicy flavor.

If it is desired to use this cure and turn out well cured corned beef in 12 to 15 days, pump the pieces with the following pumping brine before packing:

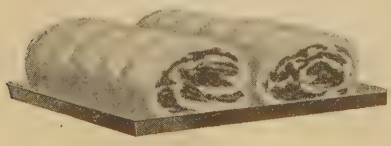
Freeze-Em-Pickle Sweet Pumping Brine

1 lb. Freeze-Em-Pickle,
2 lbs. dry salt,
1 lb. best granulated sugar,
1 gal. water.

Pump this at the rate of 1 ounce pumping brine per pound of beef.

Rolled Spiced Beef

First.—Take 100 pounds of boneless beef plates and place them in brine made as follows:



8 lbs. common salt,
1 lb. Freeze-Em-Pickle,
2 lbs. granulated sugar,
1 lb. Zanzibar-Brand Corned Beef Seasoning,
6 gals. cold water.

Second.—Cure the plates in this brine 10 to 20 days in a cooler. The temperature should not be higher than 42 to 44 degrees Fahrenheit, but 38 to 40 degrees temperature is always the best for curing purposes.

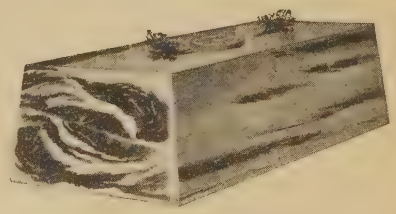
Third.—After the meat has been fully cured, sprinkle some Zanzibar-Brand Corned Beef Seasoning over it: then roll the meat and tie tightly with a heavy string.

Fourth.—Cook the meat slowly. Rolled spiced beef should, like ham, be cooked in water held at 160 degrees F.

This rolled spiced beef is sold to customers raw as well as cooked. Many prefer to buy it raw and boil it at home. This style of corned beef makes a beautiful display on the counter and butchers will find this a profitable method of disposing of fat plates. Rolled spiced beef brings a good price and is a ready seller. Those liking garlic flavor may add a small quantity of Zanzibar-Brand Garlic Compound.

A safe way is to mix the above curing formula together dry and, before adding the water to make the pickle, using one-fourth of the mixture to sprinkle on the inside of the meat before it is rolled. The balance of the mixture left after rubbing and rolling the beef should then be used in the water to make the pickle. This will insure a safer and quicker cure as it works both ways at the same time.

Pressed Glazed Brisket of Beef



First.—Take small briskets of beef, remove the bones and cure like corned beef, adding to the brine some Zanzibar-Brand Corned Beef Seasoning in a sack. Also add a small quantity Zanzibar-Brand Garlic Compound.

Second.—After curing for fifteen to eighteen days, wash the briskets well.

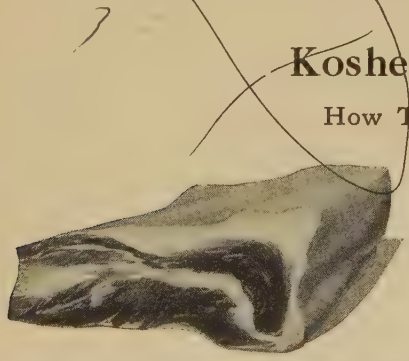
Third.—Allow them to hang a day or two; cook and press them in the same manner as cooked corned beef.

Fourth.—When cold, glaze as follows:

Dissolve three ounces of Zanzibar-Brand Savory Jell-Jell in one pint cold water. When it swells bring it to nearly boiling point to dissolve it completely, but do not boil. Color to a rich brown with pure caramel color. Then allow it to cool sufficiently so that it can be painted over the cooked brisket of beef.

If the first coating is too thin, repeat a few minutes later until a good coating is on. Should the Jell-Jell begin to set before the brisket coating is finished, dip the Jell-Jell into hot water, being careful not to melt it too thin, otherwise it will run off the brisket. Should this occur, cool it off and then apply with a bristle brush as if painting.

Decorate with parsley or a slice of lemon. It sells well and makes an attractive article for the butcher's window and counter.



Kosher Brisket

How To Prepare

First.—Select the briskets from heavy No. 1 steer forequarters. Bone them out as neatly as possible, without "ragging" the meat when separating it from the bone.

Second.—Wash them in lukewarm water and then place them in cold water for thirty minutes. Remove them from the cold water, pump at the rate of 1 ounce pumping brine to the pound of brisket, and they will be ready for the brine. The formula for pumping brine is on page 120.

Third.—Prepare the curing brine as follows:

For 100 pounds Kosher Briskets, use:

- 8 lbs. Salt,
- 1 lb. Freeze-Em-Pickle,
- 2 lbs. granulated sugar,
- ¾ oz. Zanzibar-Brand Garlic Compound,
- 1 lb. Zanzibar-Brand Corned Beef Seasoning,
- 6 gals. cold water.

Fourth.—Mix all the above ingredients together and, when dissolved, the brine will be ready for the meat.

Fifth.—Put the brine into the curing barrel first and pack the briskets into the brine. Do not place the briskets in first and then pour the brine over them. If you do, the brine will not get between the meat as it will by placing the meat into the brine.

Sixth.—Press the top layer down so that the brine will entirely cover the meat; put a clean barrel top or some boards over it and weight it down or wedge it down from the ceiling of the curing cellar to keep the meat submerged.

Seventh.—After the briskets have been in brine 5 days they must be taken out of the brine and placed back into it so as to lie in a different position. If this is not done flat pieces of meat may stick together, without brine between them, and then will not cure. Repeat this overhauling on the tenth and fifteenth days.

Allow these briskets to remain from 20 to 30 days in cure; whereupon they will be ready for smoking, cooking or shipping.

How to Smoke Kosher Brisket

First.—Remove briskets from the tierce or vat and place them in cold water for two hours.

Second.—Then wash them well, insert stout ham cord in the thick end of the briskets, and hang them to drain and dry on the surface.

Third.—Smoke them to suit in a medium heated smoke-house, about 120 degrees. When smoked, allow them to cool; then they will be ready for shipping or cooking.

Directions for Cooking Kosher Brisket

First.—Place them in hot water and slowly bring the temperature up to 200 degrees F.. Allow them to remain in this temperature from 2½ to 4 hours, according to size. Inspect them occasionally, as some are smaller and the meat is more tender than others and will be cooked sooner.

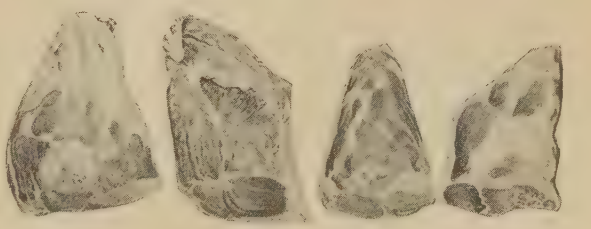
Second.—When cooked, take them out of the water to drain, and cool before placing them in a refrigerator or marketing them.

Note:—Some people prefer the briskets not smoked. Such unsmoked briskets may be removed from the curing vat, soaked, washed, hung to drain, and then placed in a dry room, or in a steam heated smoke-house to dry before cooking. Some people cook them immediately right out of cure, but such briskets have not as good a flavor as those that have been dried a few days.

Dried Beef

Curing Beef Hams and Shoulder Clods For Smoking

Select good, firm beef buttocks, properly chilled through and faced as closely as possible. Beef hams which are soft and "sloppy" or too light should not be used for dried or



Inside Outside Knuckle Shoulder Clod

chipped beef. Such meats should be cut up and dry-cured with Freeze-Em-Pickle, principally for use in summer sausage.

Suitable beef hams are cut into three parts—"insides," "outsides," and "knuckles." These are carefully trimmed and all fat and kernel (hardened flesh) removed.

The parts of the hams are graded into several averages for different lengths of curing and smoking and to suit various demand. The inside pieces are the heaviest, are valued as the choicest, and are most in demand.

Shoulder clods are handled entirely like beef "outsides", in curing as well as in smoking and drying: in fact, they may be cured at the same time and in the same vats and tierces with outsides.

Leaching Beef Hams and Shoulder Clods.—As soon as they are sorted or graded, put them into plain salt brine testing 75 degrees on the salimeter and then leave them there 5 to 6 hours to remove all slime and clotted blood. Then take them out of the salt brine and sort them into insides, outsides, knuckles, and clods, and each of these again into different averages.

Pumping.—Beef hams and shoulder clods should be pumped with the following pumping brine:

Freeze-Em-Pickle Sweet Pumping Brine

1 pound Freeze-Em-Pickle,
2 pounds dry salt,
1 pound best granulated sugar,
1 gallon water.

The actual pumping is like the pumping of fancy pork hams of equivalent weight: that is, about 1 ounce of pumping pickle to the pound of meat.

Packing for Cure.—Beef hams and shoulder clods are best cured in open vats or tierces. As soon as the vat or tierce is packed and the heading grate is fastened down in the vat, cover the meat completely with Freeze-Em-Pickle beef-ham brine, testing 70 degrees on the salimeter.

Freeze-Em-Pickle Beef-Ham and Shoulder-Clod Curing Brine

For each 100 lbs. of beef hams and shoulder clods, use:
8 lbs. common salt,
1 lb. Freeze-Em-Pickle,
2 lbs. best granulated sugar,
6 gals. cold water.

Overhaul on the fifth, tenth, and fifteenth days after packing. The manner of overhauling in open containers is described on page 63.

Cured Age of Beef-Ham and Shoulder-Clod

Very small pieces, 2 to 6 lbs., 20 days,
Small pieces, 7 to 10 lbs., 25 days,
Medium pieces, 11 to 14 lbs., 30 days,
Large pieces, 15 lbs. and upward, 40 days.

Dried beef must be thoroughly cured: therefore, knuckles and larger pieces must be left in cure a little longer.

The curing temperature should be between 38 and 40 degrees F. for best results.

Soaking.—Before smoking the cured beef hams and shoulder clods, soak them in cold water, 10 minutes for each day in cure.

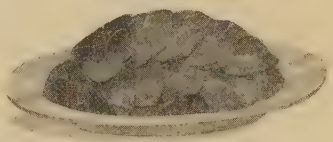
Draining and Trimming.—The pieces are then trimmed if necessary and hung on smoke-house sticks, by means of S-hooks or strings, and allowed to drain and dry before being put into the smoke-house.

How to Hold Beef Hams and Shoulder Clods That Are Fully Cured

If not needed for smoking when fully cured, take the beef hams and shoulder clods out of the curing pickle and drain them on racks which may lie directly on a drained floor. Let them drain 3 days, overhauling on the second day by moving the entire pile, piece by piece, until those which were at the bottom are at the top. After the third day, pack the meat dry loosely in tierces. Fill the tierces to the top: then transfer them to cold storage as long as desired at a temperature anywhere below 28 degrees F. Thaw out at curing room temperature as wanted for smoking. Then soak, drain and smoke as if the meat had not been frozen.

Drying and Smoking Cured Beef Hams for Slicing

Soak all beef hams in cold water, ten minutes for every day they were in cure. If over-cured, soak the same length of time, but change the water three times.



CHIPPED BEEF

After soaking, wash, trim, and hang them in the smokehouse. Allow them to drain until dry before starting the smoke. It

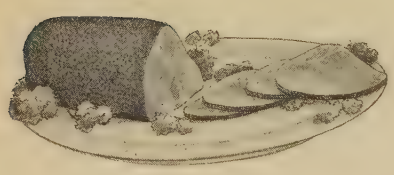
takes considerable time to dry beef hams for slicing, and they need watching to determine when they are dry enough inside; that is, to slice properly.

If one sells beef hams whole it is not necessary to shrink or dry them as much as when one slices them.

Some packers use steam coils in their smokehouses for first drying the meat, and then, after it is dry, smoke only about 48 hours, depending upon the degree of heat and dryness of the meat.

If one is not equipped with steam coils, the smokehouse can be kept hot by using a salamander, burning charcoal or coke. The temperature required for smoking and drying is 130 to 135 degrees. When smoked and dried, keep the beef hams in a cool, dry place. By following these instructions a high grade of smoked dried beef hams will be produced for sliced and chipped beef.

Cooked, Spiced, Smoked Beef



Select beef rounds or shoulder clods weighing 5 to 8 pounds each.

Soak the beef hams or shoulder clods over night in a plain salt brine, 70 to 75 degrees on the salimeter, in a cool room or in a cooler. The next morning take them out of this brine and pump each piece with the following pumping brine:

Freeze-Em-Pickle Sweet Pumping Brine

1 lb. Freeze-Em-Pickle,
2 lbs. dry salt,
1 lb. best granulated sugar,
1 gallon water.

Pump about one ounce of pumping brine to each pound of meat. Then prepare the following:

Spice Mixture

For each 100 lbs. of meat to be cured, use: { **1 lb. Zanzibar-Brand Chile Powder,** / **1 lb. brown sugar.**

Mix thoroughly and divide this into as many portions as there are pieces of meat to the 100 lbs. Rub a portion on all parts of each piece, especially in the gashes and pockets.

Then put the meat down in tierces, barrels or tubs and cover with the following brine:

Freeze-Em-Pickle Curing Brine

For each 100 lbs. of meat, use:
- 8 lbs. common salt,
- 1 lb Freeze-Em-Pickle,
- 2 lbs. granulated sugar,
- 6 gallons cold water.

Overhaul on the 5th, 10th and 15th days and take out of cure on the 20th day. Soak in cold water, 10 minutes for each day in cure, and hang on S-hooks or strings to drain a few hours, until dry. Then put the meat into a cold smoke, and smoke for about 24 hours.

Immediately out of smoke, cook the meat in water held at 170 degrees F. 30 minutes for each pound: that is, cook 4-lb. pieces 2 hours; 8-lb. pieces 4 hours. Tough beef or coarse bull beef may need cooking at as high as 200 degrees F. While cooking, prepare the following batch of spice mixture. Remove the cooked beef from the water and as soon as cooked enough to permit handling, rub the spice mixture on each piece of meat.

Spice Mixture

For each 100 lbs. of meat, use:
- 1 lb. Zanzibar-Brand Chile Powder,
- 1 lb. brown sugar.

Mix thoroughly and divide this into as many portions as there are pieces of beef in 100 lbs. Rub a portion on all parts of each piece, especially in the gashes and pockets.

Though it can be used as soon as cold, it is much improved by holding three or four days. It has good keeping qualities, but the demand for it is so great, after the public has once tried it, that it is hard to hold even long enough for the final spice rub to penetrate.

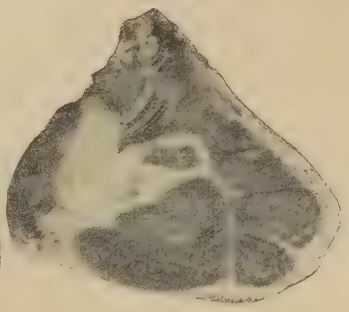
Pepper Beef

Pepper beef can be made like spiced, cooked beef or it can be made by taking Freeze-Em-Pickle-cured beef hams or shoulder clods, soaking them, draining till nearly dry, and then coating them completely with finely ground black peppers with pinch of finely ground cloves These are then smoked and dried at a medium heat for a period of six days until perfectly dry.

Mannheim Essig Braten

(Vinegar Roast)

Mannheim Essig Braten is a popular German dish and will sell well to German, Polish and Bohemian customers. It is obtained from rumps, butts or rounds of beef. Any butcher can easily prepare it and it is commonly used for pot roasts.



Directions for Curing

First.—Take 100 lbs. of good quality beef hams, round or rump.

Second.—Then put them into a barrel or tierce, and pour the following pickle over all the meat:

8 pounds common salt,
1 pound Freeze-Em-Pickle,
2 pounds granulated sugar,
1 pound Zanzibar-Brand Corned Beef Seasoning,
3½ gallons water,
2½ gallons 60-grain white distilled vinegar.

Be sure that the meats are well covered. If a garlic flavor is desired, add one tablespoonful of Zanzibar-Brand Garlic Compound.

Directions for Preparing Pickle

First.—Boil the Zanzibar-Brand Corned Beef Seasoning in a muslin sack or cloth for thirty minutes, in one-half gallon of the water to be used in the brine. Allow it to cool thoroughly.

Second.—Then mix the contents (without opening the sack or cloth) with the Freeze-Em-Pickle, salt, sugar, water and vinegar. When thoroughly mixed and cold, pour the pickle over the meat, pressing the meat down firmly. Three days after putting it down, overhaul so that the brine will get to all parts of the meat. Allow it to remain in the pickle from one week to ten days.

Mannheim Essig Braten is sold and recommended for use as pot roasts. Each customer should be given about half the same weight of pickle as of meat.

This meat should be cooked as pot roast in the pickle in which it was cured; water can be added if necessary, but better results are obtained by cooking in the pickle brine only. This formula was sent in by a good, old-fashion customer of B. Heller & Co. We, and others, have tried it out and it has our approval. Furthermore, we recommend that all butchers who have German, Polish, or Bohemian trade, make this corned beef and always carry a few pounds on hand. By introducing it to customers they are sure to build up a good trade in it.

Bastirma or Pastroma

In Asia Minor and Egypt, for want of refrigeration and dry rooms, Bastirma or spiced beef is made in November or in March when the ideal curing temperature is more nearly approached. In America, it can be made at any time, provided an ordinary cooler or ice box and a sausage dry room are available.

Select flat pieces of lean beef weighing 2 to 5 pounds. While it

can be made without pumping, time is gained and better results are had by pumping the meat as soon as all animal heat is out of it. Use Freeze-Em-Pickle Sweet Pumping Pickle at the rate of one ounce to each pound of meat in a piece.

Freeze-Em-Pickle Sweet Pumping Pickle Formula

1 pound Freeze-Em-Pickle,
2 pounds dry salt,
1 pound granulated sugar,
1 gallon water.

It is then ready for dry salting.

Dry-Salt Curing Mixture

For 100 pounds beef, use	1	pound Freeze-Em-Pickle,
	5	pounds dry salt,
	2	pounds granulated sugar,
Total,	8	pounds.

First.—Divide the dry-salt mixture into as many portions as there are pieces of beef. Rub one portion on all sides of a piece of beef and pack these into a clean barrel, tierce or tub. If any salt mixture is left over, use it to fill possible air spaces between pieces of meat and to cover the top. Leave the meat in the salt mixture till cured through to the center. This will take from 10 to 20 days, depending on the size of the pieces and on the temperature.

Second.—When cured through, soak the meat in cold water, 10 minutes for each day it has been in cure.

Third.—Wrap each cleaned piece of the beef in a clean, dry cloth and pack in a press or in a strong tierce that is perforated at the bottom for drainage. Cover the meat with clean boards and weight these down with about 500 pounds to each tierceful. Repack the meat in press three times, once each day for three days, using fresh, cleaned wrapping cloths at each repacking. Each time, those which were at the top are placed at the bottom and the order of all the pack is reversed.

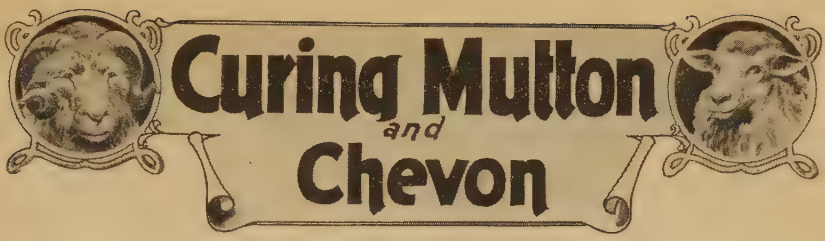
Fourth.—When all the water is out, take the meat out of press, remove the wrappers, tie a loop of stout twine into each piece of beef and hang it in the fall or spring sun or, at any season, in the sausage drying room. In either case, it must be completely protected from flies. If exposed to dust in drying, it must be washed when completely dried, before proceeding with the next step.

Fifth.—Prepare the following spices:

For each 100 pounds (green weight) of beef, use:	1	pound 10 ounces Zanzibar-Brand Pure Garlic Powder,
	1½	pounds ground cumin seed,
	¼	pound Extra Hot ground red pepper,
	¼	pound No. 1 Blend ground cinnamon,
	3	ounces ground cloves,
	3	ounces ground allspice.

Mix all the spices thoroughly, in the quantity needed for the weight of the beef cured, adding enough water to make a workable paste. Keep the paste over night before using. Then divide the spice paste into as many portions as there are pieces of beef. Rub a portion on all sides and into the cuts and pockets of each piece and pack the pieces in a clean barrel, tierce or tub, leaving them there for about 8 days.

Sixth.—At the end of the 8-days, take the spiced beef from the container and shake the loose spice paste into the container. If necessary, add more water again to make a workable paste. Rub this once more on all parts of the beef and hang it in a cool place or in the sausage dry room. When dry, it is finished Bastirma, ready for use. It will keep indefinitely.



Surplus mutton, as well as goat meat, is best disposed of by curing for meat loaves and certain varieties of sausage.

Goat or mutton taste and odor, in extreme cases are best treated with the Freeze-Em-Pickle over-night process of curing. The meat is simmered 15 minutes. The liquid is then drawn off and sufficient reboiled (used) fancy ham pickle, heated to 180 degrees F., is added to cover the meat in open containers. This is left standing over night in a warm room. The pickle meat must have a strength of 75 degrees on the salimeter. Therefore, mix 1 pound Freeze-Em-Pickle with 5½ pounds salt and dissolve enough of the mixture in the reboiled pickle to raise the strength to 75 degrees on the salimeter when the pickle has a temperature of 180 degrees F.

The regular sweet-pickle formula produces the finest results in the curing of mutton and goat meat. It tests about 70 degrees on the salimeter at regular curing-cellar temperature. Make it as follows:

For each 100 pounds of mutton or goat meat, use:

- 8 pounds common salt,
- 1 pound Freeze-Em-Pickle,
- 2 pounds best granulated sugar,
- 6 gallons cold water.

Quarter the carcasses or bone them and pack in barrels or tierces. Overhaul on the fifth, tenth, and fifteenth days. They will be fully cured in 18 to 20 days.

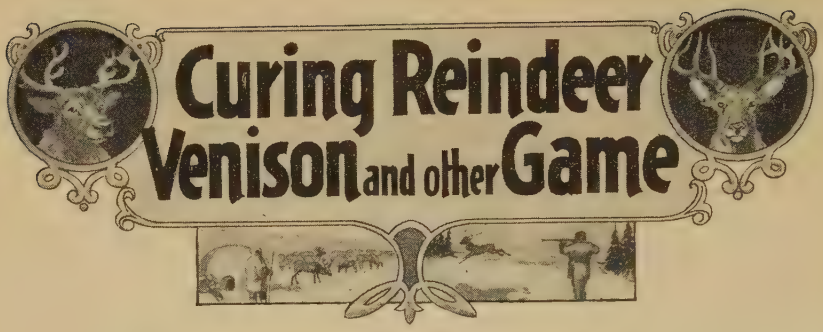
If the pieces differ in size, put the smallest at the bottom of the container and the largest at the top. Reverse the order at each overhauling. After the third overhauling, the small piece will be at the top and will then be taken out of cure first, according to their weight.

Large pieces of mutton, especially the leg, should be pumped before placing them in the brine. Pump with fancy pumping pickle made as follows:

1 pound Freeze-Em-Pickle,
2 pounds salt,
1 pound granulated sugar,
1 gallon water.

Pump at the rate of 1 ounce pumping pickle to each pound of meat in the piece.

Smoke mutton and goat meat until they have a good chestnut color, following the directions for smoking sweet-pickle-cured meats, pages 286 to 287.



The Reindeer of Alaska has already increased from a herd of 171 in 1892 to one of over half a million. Regular shipments are made, mainly to Minneapolis and Seattle, for distribution, constituting the nucleus of a promising "infant industry". Since it is estimated that the tundras (ranges) of Alaska can maintain ten million head, it seems certain that reindeer will become a factor in the meat supply of at least the northern states.

Dressed carcasses, weighing about 150 pounds, are shipped to the States, frozen; either skin on or skin off. The meat is not "gamy" in flavor, as the animal is more or less domesticated, and is described as having a flavor between that of beef and of mutton, with the juiciness of beef and the tenderness of venison. It is much in demand among caterers and the larger hotels and, when cured with Freeze-Em-Pickle and sugar, is most delicious.

The producers in Alaska should either cure the meat after first properly bleeding and cooling the carcasses, or they should first bleed and cool properly, then sharp-freeze at a temperature of 5 degrees below zero F. or lower and carry at any temperature below freezing. In this way, the cell structure of the meat will not be broken down as in slow freezing and it will have better keeping quality when thawed out and cured. The consignee in the States should then either thaw out the entire carcasses at curing cellar temperature (38 to 40 degrees F.) and put them into cure as quickly as possible after getting out all the frost, or he should sell the loins, ribs and shoulders fresh and thaw out the rounds for curing. The round of a larger carcass can be cut into three pieces, in the same manner as dried beef, and the round of a small carcass can be cured in one piece.

Formula for Venison and Game Curing Pickle

For each 100 pounds of Reindeer, Venison, Elk and other game, use:	8 pounds common salt, 1 pound Freeze-Em-Pickle, 2 pounds best granulated sugar, 6 gallons cold water.

Smoke and dry the meat in the same manner as dried beef.

Venison and all other game meats are seldom at their best when eaten. The huntsman's facilities for the proper care of the carcass are not such as to enable him to chill the meat and remove the animal heat properly. The Freeze-Em-Pickle process of curing, properly applied according to directions, overcomes the effects of improper care, if actual putrefaction has not set in, and tends to neutralize "gamy" taste. And yet it retains the natural juices which give the meats their distinctive flavor and quality. Game cured by this process has a delicate zest and piquancy far superior to the green or uncured flavor. It would make all men lovers of game.

For best keeping, the animal should be properly bled immediately after being killed. It should then be promptly cooled without freezing, if possible.

No hunter should ever start out without some Freeze-Em-Pickle in his kit. In an emergency he can rub the face of the meat with it alone, to keep it in condition until proper curing can be undertaken. Before curing any kind of game meat, it should first be carefully scrubbed with full strength plain salt brine.

Elk weighs 700 to 1000 pounds for an adult male and 500 to 800 pounds for an adult female. It dresses with even less waste than beef and sells for 50 cts. to $2.00 per pound, according to season and demand. In suitable country, farmers should be encouraged to breed elk. When domesticated, it will graze with cattle, sheep and goats, and it is as effective as any of them in clearing objectionable brush land. It can be made a profitable item, both for the farmer and for the butcher.

Elk should be slaughtered and chilled in the same manner as beef. Sell the forequarters and loins fresh and cure and smoke the rounds. Cut elk rounds into three pieces, "inside," "outside," and "knuckle," and handle them entirely like dried beef. See directions on pages 123 to 125.

Goose Breasts and Goose Shanks

How to Sugar Cure and Smoke

Smoked sugar cured goose meat, when properly prepared, is without doubt the finest delicacy in smoked cured meats. It is eaten raw after being smoked.

SMOKED GOOSE SHANK

The geese should be heavy and well-fattened. They must be properly slaughtered and thoroughly chilled. It should be remembered that unless the animal heat is chilled out of the geese, the meat from them will not cure any better than pork or beef would that has not been properly chilled.

SMOKED GOOSE BREASTS

If one has only an ordinary ice box, it is well, after the geese are killed and the feathers have been removed, to open and draw them; then place them in ice water and allow them to remain for several hours. When cooled through, take them out of the ice water and hang them in a refrigerator for twenty-four hours before cutting.

The shanks should be cut out the same as hams. They weigh from 1¼ to 1½ pounds each. The breasts should be taken out as large as possible, and the breast bone removed. They will then weigh from 1½ to 3 pounds each.

For 100 lbs. of breasts or shanks make the following brine, testing about 50 degrees on the salimeter.

10 pounds common salt,
2 pounds Freeze-Em-Pickle,
3 pounds granulated sugar,
4 ounces Zanzibar-Brand Garlic Compound,
10 gallons cold water.

First.—Cure the shanks in the above brine for 7 days, and the breasts for 15 to 20 days. This is done by preparing the right quantity of brine and simply dumping the meat into it, covering with a grate, sufficiently weighted down to keep the meat submerged. Put down the shanks and breasts in separate containers. Cure in a temperature of 40 to 45 degrees F.

Second.—When the meats are cured, remove them from the brine, wash them in clean water held at 100 degrees F., wipe them with cloths wrung out of hot water, hang them in the smokehouse, and smoke three to four days with the coolest smoke possible. The breasts, when cured and washed, should be wiped dry on the inner side, rolled and tied tightly, as per illustration, and then hung in the smokehouse.

Curing Meats for Canning

The manner of curing meats for canning purposes depends on the possible length of time the canned goods may be carried. The so-called "Over-night cure" is satisfactory for canned meats that are to be marketed at once and used within six months at the most. But if meats are canned for an indeterminate market, they should be given the so-called "Eight-day cure." In reality, such meats should remain in cure from 8 to 30 days, depending on the cut and the degree of thoroughness of the cure. Thoroughly cured meats that are properly canned and processed remain wholesome and appetizing for years.

In the over-night cure, the meat should be simmered 15 minutes. Then draw off the liquid, heat sufficient reboiled (used) ham pickle, skimmed and strained, to 180 degrees F. and cover the meat with the hot brine in open trucks or other convenient containers. The pickle used should have a strength of 75 degrees on the salimeter.

To raise the strength of reboiled ham pickle to 75 degrees, mix Freeze-Em-Pickle and clean, dry salt in the proportion of 1 pound Freeze-Em-Pickle to 5½ pounds of salt. Add the mixture slowly when the pickle is hot, while agitating, until the required strength of 75 degrees is reached.

In the "eight-day cure," pack the meat in the regular vats or other open containers as for other pickle cures. Then cover it with a regular pickle made as follows, forking the meat over so as to get the pickle to all parts of it.

"Eight-Day-Cure" Pickle Formula for Canned Meats

Tests 75 degrees on the salimeter.

For each 100 pounds of meats for canning, use:

- 9 pounds common salt,
- 1 pound Freeze-Em-Pickle,
- 2 pounds best granulated sugar,
- 6 gallons cold water.

Cut the meat into pieces weighing less than 1 pound each. In addition to that, score (slash) heavily any pieces of chuck and brisket to facilitate quick penetration by the pickle.

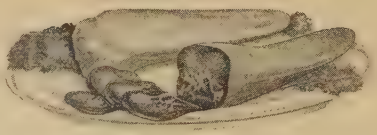
The curing temperature is the usual 38 to 40 degrees F.

Have the brine ready in the barrels in vats and throw the meat into it. In this way the brine gets to each piece and the meat is not packed solidly.

Overhauling insures more thorough cure and shortens the time required for curing. Overhaul on the fifth, tenth, and fifteenth days of the cure by simply forking the meats over; it is not necessary to handle each piece separately. They are fully cured in 10 to 30 days, according to the kind of meat and size of piece.

Curing Beef Tongues

Trimming.—In starting to trim tongues, always begin with those which were placed in the cooler first. Do not trim any which have a temperature of over 38 or 40 degrees F. in the heavy part of the tongue.



FREEZE-EM-PICKLED TONGUES

Trimmed with three rings of the gullet left on, they are known as long-cut; cut off at the palate, with a good surplus of fat left on, they are short-cut. When they are too small for short-cut tongues, or when they have been mutilated, they are classed as canner tongues. The trimmings should be Freeze-Em-Pickle dry-cured like beef and pork trimmings (see pages 171-173), and used in making sausage.

Cleaning.—On the same day, as soon as possible after trimming, put each tongue, regardless of grade, through the dry-salt dipping tub. This tub is filled with full-strength salt-brine, testing 100 degrees on the salimeter. Scrub the slime from the tongues in this brine with a rice-root brush or any other stiff brush, giving special attention to the vicinity of the gullet, where the parts are slimiest. A knife or a bell scraper may be used instead of the brush by scraping from the point toward the gullet.

Draining.—When scrubbed clean, pile the tongues on racks to drain.

Grading and Packing to Cure.—After trimming, cleaning, and draining, on the same day, sort the beef tongues into long-cut and short-cut averages.

Pumping.—As a rule, tongues are not pumped, because the welts left by a carelessly used pumping needle are too apparent. Besides, even the largest beef tongues are fully penetrated, in the Freeze-Em-Pickle process, in 25 to 30 days. If the temperature is kept under 40 degrees F., there is no need of it unless one wishes to increase the size of the tongues.

How to Increase Size of Tongues.—Our Mr. B. Heller has made some novel experiments in pumping beef tongues, increasing their size and cutting down the time of a complete cure without leaving any signs of the needle.

Every tongue has a main artery exposed at the gullet. This main artery is connected with every blood vein in the tongue. By inserting the pumping needle in this artery and holding the artery tightly around the needle, a tongue can be pumped to twice its natural size and cured in one-fifth less time than when not pumped. After pumping the tongue through the artery, put a clamp on the artery to hold the brine in the tongue. The fancy pumping pickle on page 56 gives the finest results.

Pickling.—After the barrels, tierces, or vats are packed, fill them immediately with the following

Freeze-Em-Pickle Brine for Curing Beef Tongues

Testing about 75 degrees on the salimeter at curing temperature.

Per 100 pounds of beef tongues, use:
- **9 pounds salt,**
- **1 pound Freeze-Em-Pickle,**
- **2 pounds granulated sugar,**
- **6 gallons water.**

Keep them at the usual curing-cellar temperature of 38 to 40 degrees F.

Overhaul, on the fifth, tenth and fifteenth days, by repacking in other curing packages and pouring the same pickle over them. See article on Overhauling, pages 63 and 64.

Cured Age.—Beef tongues are fully cured at 27 to 30 days. If there are no orders for them by the thirty-fifth day, put them into cold storage at 15 degrees F. to check further cure and hold them there till wanted. The limit of time they should be left at curing cellar temperature in an emergency is 40 days, whether in barrels, tierces or vats.

Garlic Flavored Beef Tongues

For those who prefer garlic flavored tongues, add about two tablespoonfuls of Zanzibar Brand Garlic Compound to each tierce of tongues; add it to the brine before it is poured over the tongues. This will give them a delicious flavor which will be relished even by people who do not like fresh garlic.

Curing Pork Tongues

Pork tongues are used for canning and for making blood-and-tongue sausage, headcheese, and jellied tongue. Scalded and skinned pig and lamb tongue are dainties sometimes put up in glass jars. Whatever their use, care must be taken to prevent scoring or mutilating the tongues.

Immediately after removing the tongues from the heads, wash the slime off thoroughly under a spray of warm water. When cleaned, throw them into barrels of ice water and keep them there until thoroughly chilled. Then hang them, gullet end up, on tinned hooks in the cooler, far enough apart to prevent contact. After so hanging for 24 hours, they are ready for curing.

Pork tongues may be readily stripped of the skin if first dipped in water at 149 to 150 degrees F. If they are skinned before curing, they cure in half the time and do not shrink as much in cooking as when cooked with skin on.

Cure pork tongues, in any desired container, with the following

Freeze-Em-Pickle Brine for Curing Pork Tongues

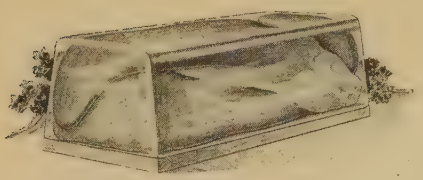
Testing about 75 degrees on the salimeter at curing temperature.

For each 100 pounds of pork tongues, use:
- 9 pounds salt,
- 1 pound Freeze-Em-Pickle,
- 2 pounds granulated sugar,
- 6 gallons water.

Overhaul on the fifth, tenth, and fifteenth days. They are fully cured in 20 to 25 days. In case they were first skinned, half that time is long enough to cure them through.

When they are to be boiled, separate the small from the large as the small need less time for cooking.

Jellied Beef-Tongue Loaf



JELLIED BEEF-TONGUE LOAF

First.—Take small sweet-pickle cured beef tongues, especially those that have been mutilated and would not look very nice if sold whole. Boil them until they are cooked through; then skin them and peel off the gullet. The gullets may be used in liver sausage and headcheese. If prepared, they can be trimmed off before boiling the tongues and kept in this way for future use in liver sausage or headcheese.

NOTE:—In boiling the tongues, use as little water as possible and boil them in a jacketed kettle or over a fire.

Second.—Have some tin pans made, six inches deep, five inches wide, and twelve inches long, and pack the tongues in these pans as tightly as possible. Ham containers and corned beef containers used in press cooking, can be used for jellied tongue loaf if their size is not objectionable.

Third.—Take a gallon of the water that the tongues were boiled in and run it through several thicknesses of cheesecloth or through filter paper, so as to make it as clear as possible.

Fourth.—To one gallon of this filtered water add 1 to 1½ lbs. Zanzibar-Brand Savory Jell-Jell. In hot weather it takes more Jell-Jell than it does in cold. Stir well till dissolved. Pour a little dissolved Jell-Jell into the pans; then fill neatly with tongues, splitting or cutting if necessary for snug fit.

Fifth.—After the tongues are nicely packed in the pans, fill all the crevices with the jelly water; have a clean press board that fits easily into the pans, put it on top of the tongues, and put on a weight so as to press them down, then set the pans aside to cool. When they have cooled put them in the refrigerator to remain over night; the next day they may be taken out of the pans and wrapped in parchment paper for shipment or sale. If any tongues are exposed where the press board is removed, top off with a little more Jell-Jell water. If sold to dealers a thin board may be placed in the top of each pan, so that the entire contents may be inverted and displayed on the board.

To empty the pans, dip the bottom and sides for a second in boiling water till enough of the gelatin melts to loosen the loaf. It may then be turned out of the molds.

Jellied Pork or Lamb Tongue Loaf

Sweet-pickle cured pork tongues or lamb tongues can be made into jellied loaves in the same manner as beef tongues, by using 6-lb. tins. Manage and prepare exactly the same as jellied beef tongue loaf, packing 4 pounds cooked tongue and 2 pounds Jell-Jell water to the tin.

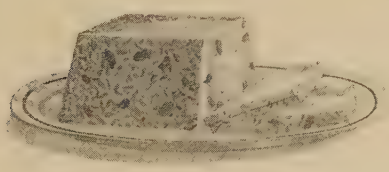
JELLIED PORK TONGUE LOAF

Tongue Jelly

10 pounds fresh hog skins or rinds,
15 pounds hog snouts, Freeze-Em-Pickle cured,
10 pounds ox lips, Freeze-Em-Pickle cured,
15 to 25 pounds hog tongues, Freeze-Em-Pickle cured.

First.—Cook the hog snouts, ox lips, and tongues from two to three hours, until each is tender. The hog snouts should be cut long and the fat left on.

Second.—Cook the hog skins separately (after preparing as directed below) in a jacketed kettle so that the soup jelly is saved. If they are cooked in a kettle into which live steam blows, the jelly will become thin. If very firm jelly be desired, add ¾ lb. Zanzibar-Brand Savory Jell-Jell.



Third.—To make a good jelly, take 10 lbs. of skins, pour boiling water over them and clean them thoroughly. Remove all the hair and use only white skins.

Fourth.—When the skins are clean add one quart of water to every pound of skins. Cook them two or three hours, until they are very tender and all the gelatin has been extracted into the water. Maintain a temperature between 160 and 195 degrees F. The stronger gelatin is extracted at the lower temperatures; the thinner, at the higher temperatures.

Fifth.—Skim off any of the fat that may come to the top, so that the jelly will be clear.

Note.—Some desire to clarify the jelly, for that obtained from rinds is turbid or milky. To clarify it, use to every quart of jelly the whites of three eggs. The jelly is first melted but not boiled. Thoroughly beat the whites and mix with the jelly. Then bring the whole mass to boiling point, after which pass it through filter cloth or double thickness of muslin. The whites of eggs congeal and collect all residue in the jelly and it remains in the straining-cloth so that when the jelly is cold it is perfectly clear. To make jelly firmer, as previously mentioned, add ¾-pound Zanzibar-Brand Savory Jell-Jell, soaking it in cold water until mushy: then add to the hot jelly. Mixing it with the soup jelly makes the latter very firm.

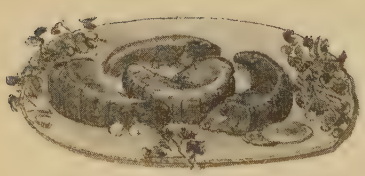
Sixth.—When all the meats are cooked, cut them by hand with a knife into small slices about ¼ to ½-inch thick. Then chop the skins into small pieces and mix them with the meats.

Seventh.—Put the mixture into clean pans or fancy molds: then pour the jelly over it and mix thoroughly. Use sufficient of the jelly to fill the containers to the brim.

Eighth.—Let the finished product cool for two hours; then put it into a cooler or refrigerator. Be sure to let it cool in a perfectly dry place as it must be kept away from moisture. The next day it will be ready for sale, either with pan or turned out of it.

Pickled Pig Tongues

In Vinegar



First.—Cure the pig tongues as directed under "Curing Pork Tongues", on page 139, but without first skinning them. It will take longer, about 20 days in all, to cure them, but it will save the first scalding and cooling.

Second.—Place the unskinned, cured tongues in fresh water in the cooking kettle and cook them, at a temperature of about 160 degrees F., for 3 hours. When cooked through, put the tongues into cold water to chill.

Third.—When chilled through, strip off the skin by hand and then split the tongues in two, lengthwise, down the middle.

Fourth.—Pack the split tongues in 60-grain vinegar, adding ½ lb. Zanzibar-Brand Pickled Tongue Seasoning to 100 lbs. of tongues.

NOTE.—Large packers formerly used a wash machine for skinning the tongues similar to the machine used in laundries. They filled the cylinder half full of tongues, heated the water to 150 degrees, and started the machine rolling. When rolled for ten or fifteen minutes, the hot water was drained off and cold water run in. The tongues were then taken out and all the skin was removed. We do not advise this method, for though it was a great labor saving device, it did more or less damage to the tongues.

IMPORTANT.—Vinegar pickled goods should invariably be kept in a cool place, but not allowed to freeze. Examine frequently and when they are not fully covered with vinegar, refill, using two parts 60-grain vinegar to one part water. Where this is done the goods can be handled with perfect safety and will keep for a reasonable length of time.

Lamb and Mutton Tongues

First soak lamb and sheep tongues in ice water until all animal heat is removed. Then spread them on racks in a cooler for 24 hours, before putting them into brine.

Best results are obtained when curing at a temperature between 38 and 40 degrees F.

Freeze-Em-Pickle Brine for Curing Lamb and Mutton Tongues

Testing about 75 degrees on the salimeter at curing temperature.

For each 100 pounds of lamb or mutton tongues, use:
- **9 pounds salt,**
- **1 pound Freeze-Em-Pickle,**
- **2 pounds granulated sugar,**
- **6 gallons water.**

Overhaul by stirring with a pole on the fourth day. They are fully cured in 7 to 11 days. If they are left in cure long enough, overhaul again on the seventh and eleventh days.

When they are to be cooked, separate the small lamb tongues from the large, for the large tongues need more time for cooking.

All cooked tongue, beef, pork or mutton, should be skinned. They may be scalded first and then skinned, but a much better way is to skin them after taking them out of the cooking water. Some tongues, especially beef tongues, are tougher than others and, when sufficiently cooked for eating, may not be cooked enough for skinning. In that case, after they are cooked long enough, bring the water to a boil and boil them for 30 minutes longer. Then the skin may be easily peeled off.

How to Handle Hog Livers

Trim hog livers at once on removing them from the carcasses, without getting any of the contents of gall bladders on the livers. All livers spoil quickly, particularly when not dry. It is important, therefore, that they be promptly removed to the cooler, at a temperature of 33 to 36 degrees F., but positively without touching the frost line (32 degrees F.). Hang them over wires, well separated, in a good circulation of air, instead of laying them in pans or trays. It will take 24 hours to remove all animal heat and chill them through. Before removing them from the cooler, see that they are perfectly dry: if they are not, dry them with cloths.

If there is no demand for them, freeze them for cold weather trade, after first cooling and drying them as above. Sharp freeze at 5 degrees below zero and store at 15 degrees F. Unless first sharp frozen, they darken in color and do not hold up when thawed out.

To pickle-cure hog livers, see that all animal heat has first been removed, as above, and do not use livers that have been frozen.

Add Freeze-Em-Pickle to full strength salt brine testing 100 degrees on the salimeter, at the rate of 1 pound Freeze-Em-Pickle to every 5 gallons brine, and agitate thoroughly.

Pour some of this pickle into the barrels, tierces or vats in which the livers are to be cured. Then put the chilled livers into the pickle. Do not fill the containers with livers first: put the pickle in first and put the livers into it. Add more pickle and livers until the container is full. Use about 6 gallons pickle for each 100 pounds of livers. Weight down with boards to keep the livers covered with pickle.

In 3 days after packing the livers, it is advisable to overhaul them. They will be fully cured in 5 days, but can be taken out of the pickle sooner for immediate use.

To pack for shipping, take the livers out of the pickle in which

they were cured, drain them, repack in barrels or tierces, head them up, fill with 100-degree plain salt brine, and bung up securely. Carry over night and inspect for leakers. If tierces are used, pack 300 pounds. In cold weather, livers that have been cured seven days with Freeze-Em-Pickle can be packed in boxes and shipped without brine.

These livers can be used to make liver sausage, liver pudding, and meat loaves, or they can be retailed for eating.

How to Handle Beef Livers

Take care not to befoul beef liver with stomach contents, as that hastens souring and decomposition, unless the befouling matter is carefully washed out of the veins.

To bleed beef livers, open the portal vein. This is the large blood vessel through which the blood is conducted from the viscera into the liver. Cut off the strings and gall bag, without spilling the contents on the liver, letting the fat remain around the portal vein.

Put beef livers into the cooler without delay, hanging them on hooks in racks, with the hook inserted in the portal vein, the butt end of the liver up and the slit, thin end down for drainage. Hang them far enough apart to prevent contact between them. Cool at the lowest available temperature above freezing, preferably between 33 and 36 degrees F.

When chilled through, cure and handle in the same manner as hog livers, using them in the same way.

Sheep, lamb, goat and reindeer livers, when handled in the same manner as pork livers and beef livers, can be used for the same purposes.

How to Dry-Cure Livers for Use in Liver Sausage, Liver Pudding and Meat Loaves

After trimming and chilling the livers as above, cut them into strips 1 inch wide. Cut these strips crosswise into 1-inch cubes. Soak these for 24 hours in 100-degree plain salt brine. Then drain off the brine and put down the cut livers in a clean tierce with the following mixture.

For each 100 pounds of liver, use: { **1 pound Freeze-Em-Pickle,** **2 pounds common salt.**

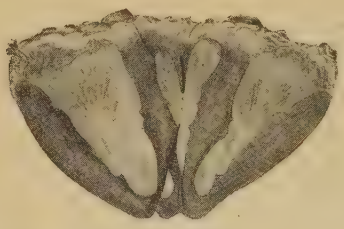
Add the mixture to the cut liver in a power mixer or mix by hand. Then scatter a handful of salt and a little Freeze-Em-Pickle in the

bottom of the tierce and gently tamp the salted liver into the tierce. If it is to be headed up, fill it completely, scatter another handful of salt and a little Freeze-Em-Pickle over the liver, cover with parchment paper, and head up. If it is not to be headed up, lay a cheesecloth over the parchment, cover with 2 or 3 inches of salt, and fold the corners of the cheesecloth over the salt.

Liver so put up will keep longer than by any other method.

Curing Beef Hearts, Pork Hearts and Mutton Hearts for Bologna and Other Sausage

Beef heart



Standard B.A.I. inspection cut of beef heart

Pork heart

Sheep heart

First.—As soon as the beef animal, hog or sheep is slaughtered, the hearts should be cut open; the pork and mutton hearts should be cut into four parts, and the beef hearts into six or eight, being sure to cut them so that all the blood cells are open and exposed. They should then be placed in ice water in which they should be allowed to remain for two to three hours. The beef, pork and mutton hearts should be kept separately: that is, in three separate lots.

Second.—Spread the heart pieces on trays or racks in a cooler as thinly as possible, and allow them to drain and chill for 24 hours; they must be thoroughly chilled so that all the animal heat leaves them.

Use for 100 lbs. of beef, pork or mutton hearts:

1 pound Freeze-Em-Pickle,
1 pound common salt.

Third.—Run the hearts through the sausage grinder, using a lard plate with 1¼-inch holes; then put into a mixer and gradually add the mixture of Freeze-Em-Pickle and salt. Be sure it is evenly divided and thoroughly mixed. If there is no mixer then mix the Freeze-Em-Pickle and salt with the meat before running it through the grinder, for the grinder will thoroughly mix it.

Fourth.—Take a perfectly sweet and clean tierce, and sprinkle a handful of salt and a little Freeze-Em-Pickle on the bottom; put the

salted hearts into the tierce and tamp them down with a tamper as hard as possible while packing.

The object of tamping with a tamper is to get all the air out and to close up all the interstices or unfilled spaces between the pieces in the barrel. The less air cells in the barrel, the better the hearts will cure and keep.

Fifth.—If the tierces are to be headed up, sprinkle a handful of salt over the top, cover nicely with a piece of parchment paper and put in the heads, filling completely before the heads are put in.

Sixth.—If the tierces are to remain open, they can be covered with a cloth. Spread about two or three inches of dry salt over the top of the cloth. This will exclude the air, and will keep the top meat from becoming dry and dark.

Seventh.—Hearts that have been properly chilled and packed in this manner can be kept with Freeze-Em-Pickle for any reasonable length of time and need not be overhauled. They can be kept for a year or longer, and whenever taken out of the tierces to use they will make fine bologna and other sausage in which hearts can be used.

Quite a proportion of properly cured hearts can be used in the manufacture of sausage with very good results. They will have a fine color and a delicious flavor. Hearts should never be pickled for bologna, but should always be dry salted as above directed. It is very often the case that hearts can be bought at a small cost when the market is low; packed and stored as herein directed until the market advances and meat is high, and then made into bologna at a handsome profit. For best results, cure at a temperature of 38 to 40 degrees F. Stay within the limits of 38 and 42 degrees, if possible.

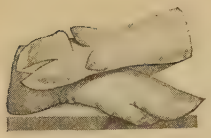
Curing Pork Snouts, Ears and Tails

Pork snouts, ears and tails should be cured in 70 degree salt brine, with one pound of Freeze-Em-Pickle added to each 6 gallons of brine.

They should be overhauled on the fifth day. This may be done by rolling if cured in closed containers, by stirring with pole, or by forking them over from one vat to another.

They may be used in a week from the time of first putting down but will develop a better flavor and keeping quality if allowed to remain in brine two weeks, till fully cured. They are then in fine shape to be cooked for sausage, meat loaves, etc.

Pickled Pig Feet



First.—Clean the pig feet carefully and cool them for 24 hours. Then cure them in brine made as follows:

6 pounds salt,
1 pound Freeze-Em-Pickle,
6 gallons water.

The feet should be cured in this brine four to five days. The brine can be used over and over again for curing pickled pig feet, until it becomes thick from the substances drawn out of the feet.

Second.—After the feet have been cured four or five days, cook them as follows. Heat a kettle of water, boiling hot; then throw the pig feet into it and keep the heat on until the water begins to boil; then check the fire or steam and simply let the water simmer just as slowly as possible until the feet are nicely cooked. The slower they cook the better, and they ought to remain in the hot water about four hours when cooked at a temperature of about 155 degrees F.

Third.—When they are cooked through, turn on cold water and let the water overflow until all the heat is out of them and the overflow runs cold.

Fourth.—Then split the feet through the center and pack them. If they are to be packed in tierces and kept on hand for a considerable length of time, the vinegar that is used should be 60 grains strong; but when they are packed in small packages for immediate use, 40 grains is strong enough.

SPLITTING PIG FEET BY HAND

Fifth.—When packing the feet, add to every 100 pounds 8 to 10 ounces of Zanzibar Brand Pigs' Feet Seasoning. This gives them that peculiar spicy flavor pig feet need to make them appetizing.

Storing Pickled Pig Feet Partly Cooked

There are certain seasons when pickled pig feet are in great demand, while at others they sell slowly. We therefore give here

a formula for storing them in vinegar which preserves them in perfect condition for one year if necessary.

Salt, cure and cook the pig feet as directed in the preceding formula, but instead of cooking them through, cook them only about half done; then split and put them into tierces, filling the tierces with 60-grain vinegar, and keep them in cold storage.

SPLITTING PIG FEET BY MACHINE

The 60-grain vinegar has a tendency to soften the meat, after a time, as if thoroughly cooked. If it becomes necessary to use them before they are soft, remove them to the engine room or other very warm place, and turn the tierces on end. Keep the top of the barrel head covered with water that it may not become dry and shrink or warp. The bottom of the barrel will not dry out and shrink because the vinegar inside keeps it moist. By allowing pig feet that are packed in strong vinegar to remain in a very warm place for a week or so, they will become nice and tender and will then be ready to repack in 40-grain vinegar in small packages for market.

Storing Pig Feet in Salt Brine

First.—Clean the feet thoroughly; rinse well in cold water and drain.

Second.—Remove the pig feet to a cooler where the temperature is about 40 degrees F. Let them lie on wooden racks 24 hours.

Third.—Then put them into clean barrels, tierces or vats and cover them with 60-degree pickle which contains one pound Freeze-Em-Pickle to every five gallons of pickle. See that they are well covered with pickle, and keep them in a temperature of 30 to 36 degrees. They will keep for a long time this way.

Preparing Pig Feet to Cook That Have Been Stored in Pickle

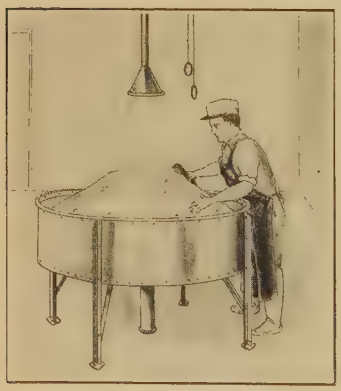
First.—When the pig feet are required for cooking, take out of the pickle the quantity desired and soak it in lukewarm water 2 or 3 hours, changing the water twice. They are then ready to cook.

Second.—Put them into a cooking vat and bring the water slowly up to about 200 degrees F. Then skim off thoroughly as considerable scum will rise to the surface. When skimmed, get the temperature exactly 200 degrees, close down the cover of the cooking vat, and leave it at that temperature, without turning any more steam on, from four to five hours. The fat which rises to the top of the cooking tank will hold the heat in. After they have cooked four hours, examine the pig feet to see if the thumb and fingers can be pressed through the skin; if so, they are done; if not, it may be necessary to turn on a little more steam. This will keep them plump and the bones will not show through the meat.

Third.—When cooked, run off the hot water and turn on the cold until they are chilled through. Take them out with a potato fork, and put them into a galvanized iron truck having a wooden rack on the bottom. The truck should have a shut-off cock on the bottom to drain off the water. Let them drain two or three hours; then remove them to a cooler and spread them to cool.

Fourth.—The next day split and pack them in 40-grain vinegar, adding to every 100 pounds of pig feet 8 to 10 ounces Zanzibar-Brand Pickled Tongue and Pigs' Feet Seasoning.

How to Clean, Cure and Cook Tripe



SCRUBBING TRIPE ON AN "UMBRELLA TRIPE CLEANER"

The large packers take the paunches from the cattle, and immediately trim off the fat from the outside. The paunches are then opened and the contents removed. They are then spread over what is known as an umbrella cleaner, where they are scrubbed under a continuous stream of water, lukewarm, to keep the tripe at about the same temperature as the animal heat was. All cud and food is completely washed off while the paunch is still warm. It is then immediately turned inside out, scalded in water at about 150 degrees F., and the mucus and scurf is scraped off, leaving the tripe perfectly clean and white. In the event that some of the fuzz has not been properly scalded, as a result of being folded, it is put back again and rescalded until clean.

Good results are obtained by adding Hog-Scald to the water, just as one does when scalding hogs. When all the fuzz is removed, the

paunch is washed in lukewarm water and then thrown into ice water and chilled thoroughly for four or five hours. After it is chilled, clean thoroughly for cooking, trim a quarter inch off the outer edge and remove all surplus skin and fat. Then put it into cold water, bring the temperature up to about 160 degrees, and let it simmer until it is cooked. If there is only one vat, draw off the hot water, turn on the cold, and chill the tripe thoroughly in the same vat in which it was cooked. When cold put it into the cooler, hanging it on racks to drain thoroughly before packing it in 30-degree salt brine or in vinegar.

After it is cooled, cut it into suitable sizes and pack it into tierces with 60-grain vinegar. Always use distilled white vinegar. If it is desired to ship tripe after it has been vinegar-cured it should be repacked in 40-grain vinegar. Tripe that has been held in vinegar is not suitable for sausage. It can be used only in souse and sour preparations.

To give it a nice flavor, add to every 100 pounds of tripe 8 to 10 ounces of Zanzibar-Brand Pickled Tongue Seasoning.

Many have trouble through their inability to cook tripe tender. This, in most cases, is due to the fact that the tripe is boiled too long in water that is too hot. Water in which tripe is being cooked should never be hotter than 155 to 160 degrees. Boiling water will always shrink and toughen tripe. It will take longer to cook some tripe than others, depending upon the age of the animal from which it is taken. Tripe should be allowed to simmer until it is cooked tender.

Fresh Tripe

The use of tripe is an economy in finely ground sausage and meat loaves, such as bologna, frankfurts, minced ham, liver sausage, and scrapple, as well as in headcheese and in pork sausage.

As a matter of economy and efficiency, the tripe should be used fresh rather than cured, and raw rather than cooked. However, a lot may often be bought at a price that would warrant curing them. In that case cure them in a weak salt brine, testing about 30 degrees on the salimeter. Such tripe is then used in the same manner as when fresh.

The fresh tripe can be ground or chopped as soon as it is completely chilled, or it can be ground or chopped only as needed: either method gives good results. If it is held whole it can be kept over night in a weak salt solution, testing about 20 degrees on the salimeter, at a temperature of 38 to 40 degrees F., or as low as the conditions permit without freezing. If it is held in the chopped or

ground state sprinkle salt into it and pack it tightly to exclude air. It needs the same low temperature to hold it over night as the whole tripe. Both have a tendency to darken when exposed to the air.

In using tripe for sausage, it should be ground or chopped even finer than the finest ground meat in the batch. It then acts like the fat of the mixture and disappears completely.

Holding Tripe and Pig Feet in a Retail Market

Fresh tripe and fresh pig feet held for sale in the market turn dark and spoil very easily; but by placing them every evening in a Cold-Storine solution made of one pound of Cold-Storine dissolved in three gallons of water, they can be kept in good condition for a number of days. Every morning take them out of the solution: those not sold during the day put back into the Cold-Storine solution over night. The solution for tripe and pig feet should not be used for storing anything else.

Sweetbreads and Brains

Sweetbreads and brains also can be kept in the same way as tripe and pig feet.

Pork Rinds or Pig Skins

In skinning hams, shoulders, fat backs and other pork cuts, the skins should be properly taken care of. They can be used in liver sausage, blood sausage, headcheese, scrapple, and in various loaves, potted meats and delicacies.

For use in sausage and meat loaves they can be cured in the fancy ham pickle given on page 67 or in a dry-salt curing mixture.

If cured in pickle they should not be bunched or stacked flat, but should be separated and thrown together irregularly, that the pickle may reach all parts of the skins. Overhaul in 5 to 7 days.

If dry-salt cured they can be smoothly stacked, sprinkling Freeze-Em-Pickle and salt mixture upon each layer. Put the flesh side up, using four pounds of salt mixed with one pound of Freeze-Em-Pickle to each 100 pounds of skins.

Cook the skins or rinds for any sausage or loaf in which the soup or jelly can be used. Cook them at 170 degrees F. for three hours or until tender. The skin of a coarse, old hog will take longer to cook tender.

Casings

Those who undertake the cleaning of casings often have trouble in getting them white. Many resort to lime and other injurious methods to bleach them, but notwithstanding such efforts, the casings remain dark and unattractive. The reason for much of this difficulty lies in the fact that the casings are not properly soaked, slimed and cleaned in the first operation. Nothing can be done to restore the yellowish cured casings to white.

Cleaning Casings

Casings should be thoroughly washed in three changes of water. The fat should then be scraped off from the outside. Water must also be run through the casings and they should be turned inside out and again washed thoroughly clean.

Beef and Sheep Casings

Clean beef and sheep casings as above and then chill them in clean water, at 45 to 50 degrees F., for one hour. Next salt and spread them on racks or tables to drain 24 to 36 hours. Then resalt them and pack in clean tierces. Use thoroughly scrubbed glucose tierces. When properly headed, store at a temperature of about 42 degrees or less but not below freezing.

Hog Casings

First strip hog casings and then soak them in water, 24 hours at a temperature of 75 degrees F.; then strip and soak again in water, 3½ hours at 100 degrees F.; and strip and soak a third time in water,

1½ hours again at 100 degrees. Then slime them by hand or machine and scrape and cut them by hand in water which is still at the same temperature. After grading at 90 degrees, bleach them 24 hours in clean cold water at 55 degrees F.

Then salt them well with fine, dry salt and let them drain on tables till cured, about one week. Then resalt them with fine salt and pack in clean glucose tierces, in sugar barrels, or in boxes that have been either paraffined or lined with wax paper. Store at 40 to 45 degrees F.

Bung guts are short and hard to hold by hand on a sliming machine. It is better to turn them and then pass them through a power washer. This gives quicker and cleaner results.

If these directions are followed to the letter, there will be no offensive odor or discoloration of the casings.

The inner lining of beef bungs is sometimes pulled out by hand and sold for use as bottle caps, gold-beater's skins, and other items when demand and price warrant it; but the bungs are weakened by the removal.

Bladders with neck cut off are not used for food products. Grade them as large, medium and small, and sell them for use by putty makers.

The width of hog bungs is measured at a point 18 to 20 inches from the crown end. Bungs, whether stuffed or empty, must have the crown cut off before they can be shipped into Canada.

How to Prepare Casings Before Stuffing

Before casings are stuffed, they should always be soaked in warm water, to make them pliable, so that they will stretch to their utmost limit when being stuffed. They will not burst as easily when properly soaked. The casings should be soaked in water at a temperature of about 90 degrees F., from one to two hours, depending upon how old and dry they are. Old, dry casings will have to be soaked until they are perfectly soft and pliable. When soaked in water that is too hot, the casings are scalded, become tender, burst in stuffing, and the heavy sausage will tear loose in the smokehouse.

Sewed Casings

There are not large hog and beef bungs enough to supply the demand for salami and large sausage. In case of a shortage, we advise the use of beef middles and the second-cut of hog bungs by first

cutting them into flat strips and then sewing such strips together on a sewing machine, to make casings about the size of first-cut extra large hog bungs or beef bungs.

Beef middles are easily sewn. They may be used in all grades of German and Italian salami.

Second-cut of hog bungs give more trouble in cutting to pattern, as well as in sewing. They are more tender and require greater care.

In machine stuffing, even under low pressure, many sewn casings split at the seams. Very small splits can be saved by slipping a patch under the cord in wrapping; but most splits must be discarded. The wrapping (cording) must, of course, be done immediately after stuffing sewn casings. Hand stuffing would save many that are split through lack of care in stuffing by machine. The sausage meat that escapes from a split, and that which is contained in discarded casings, must be saved in a clean pan or platter and mixed with the next stuffer load.

The finished sausage is practically as attractive in sewed casings as those in first-cut hog bungs. The skin of sewed casings does not peel from the sliced sausage as neatly as other casings; but that is a trivial shortcoming.

Coating for Cloth Bags Used as Casings

Wide casings are much in demand for bologna, minced ham (minced sausage), luncheon ham, and other large slicing sausages which lend themselves readily to sandwich making. In fact, the demand is greater than the supply, and cloth or linen sacks of corresponding size are much used and even preferred as substitutes. To close the pores and render the bags moisture proof (impervious), the stuffed bags should be dipped in our Zanzibar-Brand Flexine, which is a flexible bag coating and does not peel or crack off. It prevents the drying and saves shrinkage.

First.—Stuff the meat into linen or muslin sacks of suitable width and length. Cook them immediately for about the same time and at the same temperature as sausage in regular casings. Then rinse with hot water and hang them to dry at work-room temperature, for about 6 or 7 hours. Proper drying before attempting to coat with our Flexine is important. If there is printing on the sacks, the ink used must not be soluble in water. If they are to be smoked, it should be done before cooking, hanging them in a cool smoke for a period of two hours.

Second.—Provide an oblong, galvanized pan, about two feet deep, one foot wide, and long enough to dip one smoke-stickful at a time. While this may be heated in any one of numerous ways, the best method is to equip the can with a close steam coil.

Third.—Put enough of our Zanzibar-Brand Flexine into the pan to fill it to within 6 inches of the top when melted. Turn on the steam to melt the coating. Owing to the cooling effect of the dipping or immersion, the heat must be kept up to the last.

Fourth.—When the sausages are cold and the cloth bags absolutely dry, dip a stickful into the melted Flexine, keeping them completely immersed for a period of 5 to 10 seconds. Then hold them over the surface or allow them to hang there until they have stopped dripping. When the coating on the bags is set (congealed), dip once more, but only momentarily, quickly and completely immersing the bags not longer than one or two seconds.

Fifth.—Then hang the sticks of sausage, at ordinary room temperature, for an hour before hanging them in the cooler.

Handled in this manner, with our Zanzibar-Brand Flexine, sausage in bags will keep a comparatively long time without becoming slimy or moldy, and the consumer takes to it readily.

When paraffin wax is used it cracks and peels off as the cold sausage is bent in handling. Flexine coating may be bent, yields to finger pressure like animal casing, and does not crack or peel.

If color is to be used, color the empty bags first with Zanzibar-Carbon-Brand Casing Brown Mixture, rinse out excess color in hot water, and dry the bags before stuffing.

Casing Color

Smoking improves the flavor and keeping quality and, when properly limited, improves the appearance of certain sausages. The public therefore demands the visible evidence of smoke.

The pleasing color produced on casings by smoke alone is more or less uncertain and irregular. If the desirable depth of color were to be obtained by smoking only, it would require so much longer exposure in dry heat that the surface would wrinkle and shrivel and the sausage would dry out and shrink much more.

A harmless artificial color to intensify or fix a pleasing depth of smoke color thus becomes a necessity. The federal and nearly all state governments recognize the need and permit its use, if they do not actually encourage it. The public generally insists on it.

Zanzibar-Carbon-Brand Casing Mixtures are of two kinds: one to give a permanent, rich mahogany smoke color, of any desired depth, to all smoked sausage; the other to give to liver sausage that golden cream color which tempts the connoisseur.

Both mixtures consist of colors that are certified by the federal government as absolutely pure and harmless. They do not affect the wholesomeness of the sausage any more than egg affects the wholesomeness of the bread it is brushed on for color, or candy that is colored to make it more appetizing. They serve to aid digestion by exciting the appetite. The lack of pleasing color creates aversion for food and so retards digestion. Nevertheless, the coloring of sausage casings is strictly regulated, under government inspection, to prevent penetration of the casings and consequent coloring of the meat. The Freeze-Em-Pickle process preserves the natural red meat color within the sausage, and also shows through the casing and gives the sausage a better color on the outside.

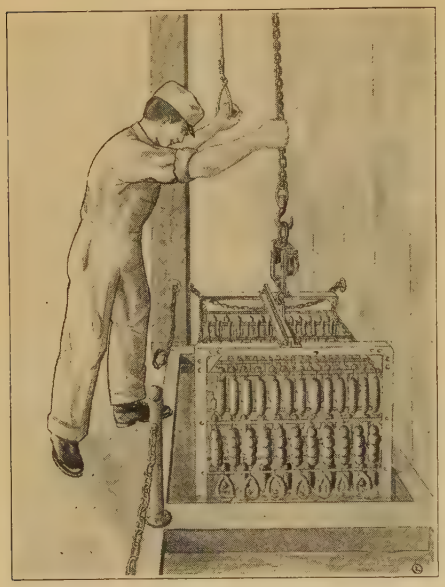
The methods of applying Zanzibar-Brand Casing Mixtures (either brown or yellow) are in complete accord with the requirements of the U. S. Bureau of Animal Industry. They are the standard methods, whether the plant is under government inspection or not. One method provides for coloring the water in which the sausage is cooked: the other method provides for momentary dipping in a stronger solution, after the sausage is first smoked and usually also cooked. The sausage maker can suit his own preference and equipment.

It will be found that the casings absorb enough of the coloring matter to weaken the solution. A little more color must therefore be added, from time to time, to keep results uniform. Establish a suitable depth of color, and maintain that at all seasons.

Directions for Coloring Sausage Casings in the Sausage-Cooking Water

This will usually be found the more efficient of the two standard methods, as it requires no separate operation for coloring the casings.

In the water in which the sausages are to be cooked, dissolve Zan-



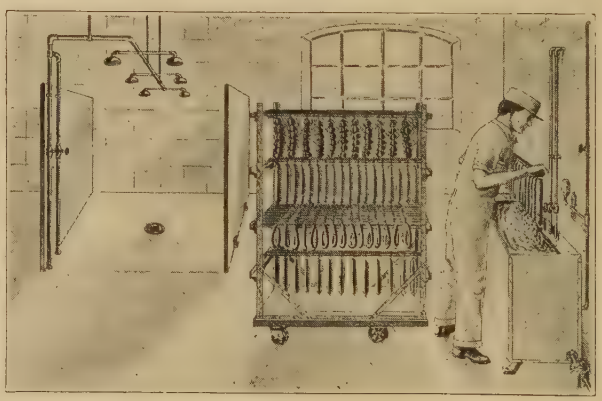
COLORING IN THE COOKING WATER IN A LARGE SAUSAGE FACTORY

zibar-Brand Casing Mixture (yellow for liver sausage, brown for other) in the proportions necessary to produce any shade of color preferred.

Dissolve the color first in a little hot water (not boiling). Then pour this solution into the remainder of the cooking water. Agitate thoroughly and then cook the sausage in it just the same as if merely cooking the sausage in plain water. Small sausage makers simply hang stickfuls in the cooking water. If the sausages are put into the water loose, they must be turned, from time to time; otherwise they will not color evenly.

Directions for Coloring Sausage Casings by Momentary Dipping

Hang the sausage in the smoke house just long enough to dry the skin well or hang it in front of a hot fire, in the sun, or any place where the excess moisture will be dried out of the casings; then proceed according to the following method.



COLORING BY MOMENTARY DIPPING

After sausage has been smoked, cooked and dried, dip it into a solution made up in the proportion of one ounce of Zanzibar-Carbon Brand Casing-Brown Mixture to every 20 gallons of water. Always dissolve it first in a little hot water (not boiling) and then pour this solution into the balance of the water to make up the dipping solution.

The water used for dipping should be about the same temperature as that in which the sausage is cooked. After dipping, the sausage must be rinsed off with hot water and thereafter with cold water, then hung up in the usual manner to drip and dry. When sausage is smoked through and is not cooked, it must be well sprayed with boiling hot water or dipped into it, to remove the grease from the casing, before being put into the dipping solution.

Before putting smoked and cooked sausage into the cooler, the individual lengths should be hung apart at work-room temperature until the surface is dry: this develops color and prevents slimy mold.

Machinery for Sausage Making

The following description of sausage machines is to guide those who are interested in making sausage according to the formulas and directions in this book, as the operation and directions for making sausage differ when the different kinds of machines are used.

Silent Cutter

This machine is adapted to chop and mix at the same time, and is considered the best sausage meat cutter. This style of cutting machine has a tendency while chopping to heat up the meat more than other machines do, but by the use of crushed ice or ice water, and following the meat formulas described herein, one will be successful and be able to manufacture up-to-date high grade sausages.

The "silent cutter" should be used, in well equipped sausage plants, for bologna, frankfurts, meat loaves, and for finely cut sausage meat in general. It incorporates ice and spices without the subsequent use of a mixer. Meats cut in other machines should have the ice or ice water, Bull-Meat-Brand Flour and spices incorporated with them in the sausage mixer, or it should be mixed by hand.

Meat Grinder

The meat grinder should be used, in large sausage plants, for grinding meat preparatory to other styles of cutters and for work on pork sausage, Polish sausage, smoked country sausage, and sometimes on bag goods. It is especially useful to cut sausage meat down to the uniform size best for the Freeze-Em-Pickle dry cure. With the aid of a special spout, the grinder can be used also as a stuffer. It is operated by hand in the small sizes and by power in the large sizes.

Rocker Machine

The "rocker sausage-meat cutter" is practically eliminated in the modern sausage plant, having been displaced by the far more rapid "rotary cutter". However, the "rocker" did excellent work in plants that were equipped with it.

The rocker was used principally for high-grade fancy summer sausage. The peculiar rocking stroke imitated very closely the clean, drawing sweep of the knife in hand cutting. It cut both the meat and the fat without bruising or "ragging".

Rotary Cutter

The "rotary cutter" has taken the place of the "rocker" in plants whose volume of business can keep it busy. It should be used in coarse-cut meats for summer sausage, farmer sausage, head cheese, and the like.

The meat is placed on a revolving table which carries it under 30 circular, rotating knives. These knives are mounted 15 in a series, on an axis over opposite sides of the table, and make 150 revolutions per minute. The circular table is about 4½ feet in diameter. The rated capacity is "approximately 150 pounds of meat cut up at one time in 2 to 3 minutes." This is at the rate of 3,000 to 4,500 pounds per hour. It requires 10 horsepower to run it.

Sausage Mixer

The sausage mixer is used especially when not using a silent cutter for mixing in the sausage binder and seasonings; also for softening and mixing chopped sausage meats, which have been placed on shelves in a refrigerator for curing and maturing purposes.

Head cheese, farmer sausage and all kinds of sausages in which the meats are to show in large pieces, are finished in the mixer.

Meats that go through the sausage mixer usually have the ice and spices added in the mixer.

Sharp Knives

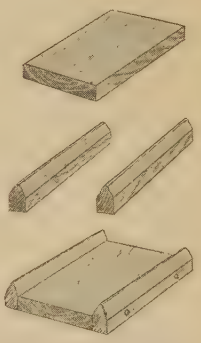
Keep the knives sharp. No matter what style of cutter, hasher or grinder is used, the cutting edges must be kept smooth and as sharp as possible, or the meats will be "chewed" and torn instead of being cut. In the Enterprise and similar cutters, the hole plate must be kept smooth, as well as the knives. Broken edges at the holes cause torn meats rather than cleanly chopped particles. Dull knives cause undue heating of the meat.

Make Your Own Linking Block

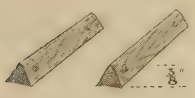
THE B. H. & CO. LINKING BLOCK IN USE

In making frankfurts, pork sausage, knackwurst and other link sausages, it is best to have the links of uniform size, suited to the variety of sausage made. A measure may be marked on the sausage table or a rule may be inlaid in it; but B. Heller & Company have devised a linking block on which the meat can be divided and the link twisted with a single motion. A separate block is necessary for sheep casings, hog casings, and beef middles and for each length of link turned out.

Take a piece of one-inch board, a foot long and three-fourths inch narrower than the length of link to be made. Plane down two strips, a foot long and planed to a ridge, as shown in the first illustration. Screw or nail these against the sides of the board as shown. Hold the casing across the two ridges, press down over the ridges with the thumb and roll from you. For the next link, roll back. The height of the ridge should be about half the diameter of the sausage.



HOW TO MAKE THE B. H. & CO. "LINKING BLOCK"



ANOTHER, FASTENED TO THE SAUSAGE TABLE

The two strips may also be planed down in triangular form and screwed or nailed down parallel, the desired distance apart, directly on the table or work bench. The "block" may be made of a single sheet of metal by simply bending up the sides to a height equal to half the diameter of the sausage. Round off the corners and smooth the top of the ridges.

THE SAME IDEA IN METAL

Clean the machinery and utensils after each use. Mold and bacterial action in sausage cause discoloration and even spoiling. Machinery and utensils standing unused in a hot sausage room can easily be the means of con-

taminating the sausage meat. Not only must the hands be thoroughly washed after all tasks foreign to sausage making, but every part of a machine, table, truck and utensil which comes in contact with the meat must be carefully scrubbed after each day's work. Use our Tru-White Washing Powder. After cleansing, it should be rinsed with a solution of Freeze-Em, an antiseptic and purifier.

Sausage Seasonings

Whatever the quality of the meats used, whatever the skill of the curer and sausage maker, the product fails to make a market for itself if it does not have the proper seasoning.

The taste or flavor of herbs and spices is due to the nature of the essential oils they contain. The intensity of that flavor is governed by the quality and proportion of such natural oils. If the oils have been extracted, the structure of the spice or plant remains, though in altered form. As seasoning, however, such exhausted spices have no more value than an equal quantity of wood shavings would have.

"Cheap Peppers."—We have tested many samples of "cheap pepper" submitted and found them to contain large quantities of pepper shells, leaves, stems, and ground olive stones.

"Red" Pepper.—On several occasions, customers have sent us supposed red pepper which they had picked up somewhere at a saving in price, but which seemed to have little or no flavoring quality. Ground California redwood, colored cornmeal with coal-tar dyes have been found in many samples.

The average butcher and packer is not equipped to detect such trickery by chemical and microscopical tests. Still he can protect himself in a measure if he regards all job lots and cut-rate spices with suspicion. The seasoning forms but a small percentage of the entire cost of a product. It would be folly to risk a batch or stake a reputation on the questionable saving in buying such goods.

Our Zanzibar-Brand spices are tested for purity and strength. They are guaranteed to be absolutely free of adulterants: no exhausted spices whatever are used in them. You pay for full strength and fine quality and we take particular pride in giving you all you pay for. Over 50 years among spices enables us to locate the best, selecting and grinding especially for the meat industry.

The Importance of Using Our Prepared Seasonings

Variations in the quality of spices are a problem to the sausage

maker who tries to maintain an unvarying flavor in his sausage. If he buys them separately and mixes them himself, his difficulty increases, because spice dealers buy from different sources and because his own judgment and measure vary in mixing each batch.

If every time the housewife bought sausage from a butcher it tasted different, she would change butchers. On the other hand, if she cultivated a taste for a sausage of particularly fine flavor and found she could always depend on getting that of a certain butcher, she would never be satisfied with sausage made by some one else.

For these reasons we have prepared the different combinations of standard herbs, condiments and spices for the ready flavoring of all the more popular meat products. They are marketed under the proprietary name of Zanzibar-Brand Prepared Sausage Seasonings. These prepared seasonings are carefully compounded according to formulas evolved out of the experience of many generations of celebrated sausage specialists in the Heller family. They are scientifically tested and **standardized for unvarying flavor and strength.** They make it easy to give any sausage its characteristic fine flavor and to maintain the same flavor under all circumstances.

Owing to the entire absence of adulterants in Zanzibar Brand Prepared Sausage Seasonings and to their consequent flavoring strength, it requires a correspondingly smaller portion of them to give the sausage any desired flavor than when impure seasonings are used. Thus, though the cost may appear higher, it is a proven economy to limit yourself to the use of only such seasonings of known purity and standardization.

The Up-to-Date Method of First Curing the Meat for Making Bologna, Frankfurts, and All Kinds of Smoked Sausage, Complying With the Pure-Food Law

In following the old method of making bologna, frankfurts and other smoked sausage, a large percentage of the albumen is drawn out of the meat, thus losing much of the richness, flavor and color which should be retained in the sausage.

B. Heller & Company have made an important improvement in the process of curing trimmings and making sausage, and sausage makers will find it greatly to their advantage to make an immediate trial of this process. A single batch of sausage made by this method will convince any sausage maker of the mistake of following the old ideas of making bologna and frankfurt sausages.

When bologna and frankfurts are made of fresh meats, they have a gray color and it is very difficult to keep them in good condition, especially during the warm weather. However, when they are made by the Freeze-Em-Pickle process, they will have a fine red color, keep much longer, and withstand shipment better during warm weather. They will comply with the pure food laws. Freeze-Em-Pickle contains no ingredients which have been prohibited by any of the food laws.

How to Cure Beef and Pork Trimmings for Making Bologna and Frankfurts

To every 100 pounds of trimmings use { 1 pound Freeze-Em-Pickle, 2 pounds salt.

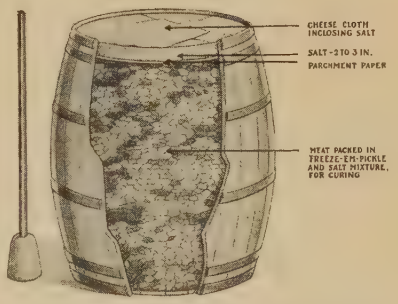
First.—Weigh trimmings and then spread them on a table.

Second.—Weigh the proportion of Freeze-Em-Pickle and salt needed for the quantity of trimmings to be cured. First mix the Freeze-Em-Pickle and salt thoroughly and then sprinkle the mixture over the meat. Distribute the mixture evenly by turning the meat on itself frequently with a shovel on the table, or mix by hand in a tub. If one has a power mixer, add the mixture of Freeze-Em-Pickle and salt to the trimmings in the mixer and let it run a few minutes until thoroughly mixed.

Third.—Put the trimmings through the meat grinder, using a plate with ⅜ or ½-inch holes, if the meat is to be used in a few days. But if the meat is to be kept for any length of time, use a plate with 1 to 1¼-inch holes. Grinding works the Freeze-Em-Pickle and salt more thoroughly into the meat.

Fourth.—Pack tightly into tubs, barrels or tierces as shown below.

In two to three days the trimmings may be used for making bologna and frankfurts. It is preferable to let the meat stand five or six days if possible before using, as this will increase the binding properties, and the meat will have a better cure. The bologna and frankfurts made with it will have a more beautiful color if the meat is allowed to be fully cured. This meat may be kept for months, if desired, by simply letting it stand at a temperature near 38 to 40 degrees F., after first covering it with a layer of salt in the manner described on the next page.



F. E. P. CURE FOR TRIMMINGS

The Regular Way to Cure and Hold Trimmings

First.—Weigh off the right proportion of Freeze-Em-Pickle and salt for the quantity of trimmings to be cured, and mix it thoroughly into the meat by one of the methods described above.

Second.—Put the trimmings through the meat grinder, using a plate which has either ⅜ to ½-inch holes or 1 to 1¼-inch holes, known as the lard plate, the size depending upon the kind of cure desired. If a plate with holes of proper size is not available, then cut the unsalted trimmings by hand into pieces the size of a walnut and then mix the Freeze-Em-Pickle and salt with the meat in a power mixer, on a table with a shovel, or in a tub by hand.

Third.—Pack tightly into barrels or tierces as shown on previous page.

In three to four days, the small-cut trimmings will have a beautiful red color and may be used. If they are held a week or ten days, they will be fully cured and may then be used in fresh sausage, or in sausage to be dried. Sausage made of meat so cured will have a much better keeping quality. **Trimmings so cured may be kept for many months without loss of quality.** When they are to be kept for a month or longer, cut 1 to 1¼-inch size.

How to Pack Trimmings in Barrels or Tierces

First.—Take barrels or tierces that are perfectly clean and sweet—this is very important. Sprinkle a handful of Freeze-Em-Pickle and salt (see mixture at top of page 165) which have first been thoroughly mixed, over the bottom of the tierce.

Second.—Fill the tierces about one-quarter full of meat that has been mixed with Freeze-Em-Pickle and salt. Then, with a tamper, tamp it down as tightly as possible. The tighter the meat is packed the better, so as to exclude air. Then place more of the meat in the tierce and tamp it. Keep on doing this until the tierce is full.

Third.—If the tierce is not to be headed up, fill it within 3 inches of the top, and after tamping the meat tight, sprinkle a handful of mixture of Freeze-Em-Pickle and salt over the top. Then lay a piece of parchment paper over the meat, and on top of this place a piece of cheese-cloth about a yard square.

Fourth.—On top of the cheese-cloth put about two or three inches of dry salt; spread it so as to cover all the meat completely and to exclude the air from the meat; then turn the ends of the cloth over the top and allow this meat to stay in the coolor until you are ready to make bologna, frankfurts, or any other sausage of it.

This meat may be used in 2 to 4 days for making bologna, frankfurts, or any other sausage, but it will have a better cure, better color, and better keeping quality in 7 to 10 days. **It can be kept and will remain in perfect condition for six months, or even longer, without re-**

handling. It does not become too salty, no matter how long it stands, and whenever one wishes to make bologna, frankfurts, or any other sausage, the meat is ready to be used.

This is known as the Freeze-Em-Pickle process, and when curing the meat in this way no brine or albumen will be found at the bottom of the tierce when the meat is taken out. The meat when removed from the tierce will be found sticky, and to possess good binding quality and a nice cured flavor. It will make delicious sausage of fine color and longer keeping quality than when made of fresh meat.

Beef or pork trimmings should be handled in the same way. No fresh meat should be used in making bologna, frankfurts, etc.

If the trimmings are to be kept a long time, it is advisable to head up the tierces. When tierces are to be headed, fill them as full as possible to exclude air, sprinkle a handful of the Freeze-Em-Pickle and salt mixture (see mixture at top of page 165) over top and then put on the head.

When making this Freeze-Em-Pickle cured meat into smoked sausage, more salt may be added if the meat is not sufficiently salty. When adding seasoning, add sufficient salt and ½-pound of sugar to every 100 pounds of meat.

Proper Temperature for Curing Sausage Meats

If the trimmings are to be used in a few weeks, any ordinary cooler that is kept around 40 to 45 degrees F. will be sufficient, but if trimmings are to be kept three to six months or longer, they should be kept in a cooler at a temperature of 36 to 38 degrees to get the best results. Until the trimmings are fully cured, never let the temperature get down to 34 degrees (the point where curing practically stops) if it can be helped, and do not let it get any higher than 40 degrees, if possible.

How to Make Bologna and Frankfurts of Fresh Beef and Pork with Freeze-Em-Pickle Without First Curing the Meat

All through our smoked-sausage formulas we give directions for making bologna and frankfurts with Freeze-Em-Pickle cured meat. If one has no Freeze-Em-Pickle cured meat and must make the sau-

sage with fresh meat, the sausage should be made exactly according to the formula, except that fresh meat should be used instead of cured meat, and the Freeze-Em-Pickle and salt should be added when the sausage is being made. Chop or grind the meat and mix it just like the cured meat, but instead of stuffing it as soon as it is made, put it into a cooler and allow it to stand for twenty-four to thirty-six hours before stuffing it into casings. If this prepared meat is stored in a cooler that has a temperature of about 45 to 46 degrees F., the meat will cure faster than if the temperature is below 40 degrees. When ready to stuff this meat take it out of the cooler, stuff and smoke it and handle the sausage like sausage made of cured meat.

Hot Bull Meat

"Hot bull meat" is cut from the bones before the animal heat has been driven out of it. When such meat is ground or chopped in that condition it absorbs a large quantity of water.

Many sausage makers prepare what is known as "hot bull meat" sausage. The meat is cured with Freeze-Em-Pickle and a supply of it kept on hand to furnish whatever beef enters into the making of smoked sausage.

To prepare hot bull meat, bone out the bull or other beef as soon as the carcass is cleaned, and dressed. While still warm with animal heat, run the meat through the ⅜ or ½-inch-hole plate of a meat grinder. Then put it into the silent cutter, adding 1 pound of Freeze-Em-Pickle and 2 pounds of salt to 100 pounds of meat. Then slowly add cold water or crushed ice. The water or ice must not be added faster than the meat absorbs it. If the bull meat is of the right quality it will absorb its own weight and more in a few minutes in the silent cutter. When the meat will absorb no more water or when it has reached the desired degree of saturation, work the air out of it as much as conveniently possible, spread the meat 4 inches deep on pans, and place these on racks at curing temperature: that is, at 38 to 45 degrees F., with the most favorable temperature at 38 to 40 degrees.

This meat can be used 24 hours after making and must not be held more than 72 hours. It has not the same keeping quality as properly chilled ground beef, cured by the standard Freeze-Em-Pickle process.

Use of Salt With Our Formulas

We advise the sausage maker not to add salt to any of the formulas using cured meat until the mixing is nearly completed: he should then taste it and add salt **only if needed.**

Bull-Meat-Brand Flour

Bull-Meat-Brand Flour is a pure cereal product, especially processed for use in sausage and meat loaves. It blends perfectly with all kinds of sausage meat; it cannot be excelled as a binder and absorbent; it is wholesome, improves flavor, and adds to the nutritive qualities of the product. Bull-Meat-Brand Flour has the reputation of being the best binder on the market.

Sausage Cooking Kettles

SAUSAGE SMOKING AND COOKING ROOM IN A LARGE PACKING HOUSE

In very large, modern sausage plants they have over-head rails running to the sausage tables. These are connected with coolers, smokehouses, and cooking kettles. Such cooking kettles should be square and large enough to submerge the style of sausage used. The kettles should be built in, with their top at the level of the floor. Such a kettle should be directly opposite each smokehouse door. The cage which holds the sausage can then be shoved from the smokehouse over a kettle, lowered and completely submerged in the hot water until the sausage is cooked. It can then be hoisted out again, sprayed or dipped in hot water to rinse, then in cold water to prevent shriveling, and sent on to dry and cool.

If it is desired to color cooked sausage, the best method is to add the coloring matter to the water in the cooking kettles. Zanzibar-Carbon-Brand Casing Brown Mixture for smoked sausage, and Cas-

ing Yellow Mixture for liver sausage are considered the best colors made: they are economical, effective, and entirely harmless. The methods of using them, either in the cooking water or by the momentary dipping process, are fully described on pages 156 to 158.

How to Prevent Slimy and Faded Casings of Smoked and Cooked Sausages

When the sausage is satisfactorily smoked, remove it from the smoke-house, color the water for cooking, and immerse the sausage for the length of time suited to the variety and size.

When properly cooked, rinse off the grease with clean, hot water of the same temperature as the cooking water or hotter. Then pour cold water over them to shrink the casings, and let them remain out of draft in a ventilated room until they have cooled through or until they are at least dry and surface cooled to room temperature. At least 30 minutes should elapse for small sausages (the larger varieties longer) before they are put into the cooler. This will prevent sweating, which is the cause of slick mold or bacteria forming on casings. If there is draft in the room, shield the sausage with burlap.

When duly precooled, move the sausage to the regular cooler, where a temperature of 43 to 45 degrees F. should be maintained as dry as possible. This will prevent bleaching of the casing color.

If sausage is to be shipped, it is best to let it hang over night and ship the next morning. For retailing, it can be sold as soon as cold.

Before packing cold sausages, it is best to take them out of the cooler and place them before an electric fan or other strong air current, which will dry them as fast as they sweat. They will be dry in about ten minutes. Then package the sausage for shipment. They will keep much longer when dried before packing.

How to Prevent Bursting and Shriveling

Many experience a great deal of trouble from the bursting and shrinking of sausage, a trouble which can be easily avoided, as it is entirely owing to the manner of cooking the sausage. When sausage is cooked in water that is too hot, the particles of meat will crumble and separate. The sausage will taste dry, although water will be between the particles of meat. The sausage will look rough on the outside and will also lose more weight than when cooked according

to directions. Many of them will burst when the water is too hot. After sausage of any kind has been cooked, it should be handled as follows. Pour boiling water over it to wash off all the grease that adheres to the casing and then pour cold water over it to shrink the casing and close its pores. This is very important and should be closely observed by all packers and sausage makers who wish to have their sausage look nice and keep its fresh appearance.

How to Prevent Discoloration of Interior

The gray or green-gray discoloration at the center is evidence usually of faulty or insufficient curing. The ingredients and proportions given in this book have been thoroughly tried and found correct for the uses given. No one in the meat business can afford to disregard them.

Strict adherence to our formulas and directions is very important to the sausage maker, as best results are obtained by following them. Correct proportions and correct use of Freeze-Em-Pickle are particularly important in avoiding green-gray discoloration.

The temperature at which sausage meat is cured should, under no circumstances, fall below 36, as the curing process is checked at about 36, and uncured meats are sure to discolor the finished sausage. This applies equally to the curing cellar and to the cooler in which sausages are hung for curing or in which meats are spread on pans for curing. If sausage enters the smoke-house incompletely cured, the outer portion may quickly cure in the heat of the smokehouse; but the center may still be uncured when it enters the cooking water: in that case, the uncured center will turn gray in cooking.

A frequent cause of the ring of discolored meat near the casing is chilling either in the chill room or in the smoke-house. Sausage should hang at room temperature until the casing is dry, before going into the cooler, both from the stuffing bench and from the cooking water. If it is put in wet, the moisture furnishes a ready medium for the growth of bacteria which attack the hemoglobin just inside the casing. This action is intensified if the loss of salt through the pores of the casing, while in the cooking water, was excessive. In any case, the complete cure according to the Freeze-Em-Pickle schedule is a good insurance against later discoloration or spoiling of sausage.

Air pockets in sausage may cause discoloration. They may be due to air pockets in the stuffer, to stuffing the casings too loosely, or to bacterial or other decomposition. The presence of air pockets can usually be seen through the freshly stuffed casings and the casings

should be promptly punctured to let out the air before smoking and before cooking.

Clean casings and clean containers for all sausage meats are an important factor in avoiding discoloration due to the growth of bacteria and fungi. Beef casings should be turned to scrape off gut fat: otherwise that becomes rancid and the chemical action may cause the meat to discolor. Utensils, machinery, trucks and containers should not only be scrubbed with our Tru-White Washing Powder, but they should also be rinsed with a solution of Freeze-Em (not Freeze-Em-Pickle, but Freeze-Em), a purifying agent that has maintained its preeminence in the meat industry of all the world for upward of 35 years.

Drippings of condensation from ceilings and overhead pipes are a source of trouble in curing to be watched, for ropy or polluted brine will not cure properly. Ventilation must be provided to dry the air without losing control of the temperature. In large plants a system of air replacement through air ducts is necessary: the cooler or refrigerator of the small operator must depend entirely on correct construction for air circulation. Where faulty planning makes a reasonably dry atmosphere impossible, the air can be dried by forcing it over or between refrigerating pipes. The condensation and freezing of the moisture on the pipes will prevent drippings from ceilings. The ice accumulations on brine pipes may be removed from the pipes periodically by sending hot water or steam through them or by mechanical means.

Sausage in Oil or Lard

The sausages ordinarily used for preserving in oil or lard are bologna, frankfurt or vienna, chorizos and country pork sausage. Mortadella is canned too, but not generally in oil or lard. Originally, only molten lard was used and the sausages were put up in crocks, lard cans, or whatever was available. Chorizos and country pork sausage are still put up in lard. For the others, however, a high grade of deodorized vegetable oil is used commercially, usually either prime summer yellow cottonseed oil or a corn oil.

The making of the different sausages for packing in oil is the same as for ordinary purposes, except that only as little water or crushed ice is used as may be absolutely necessary to prevent heating in the chopper. Sausages for canning should not be cooked in water; they are heated in the smoke-house till the casings are dry, then smoked at a higher temperature suited to each kind of sausage until they are cooked through. Bologna in beef rounds requires about 3 hours,

gradually rising to 160 degrees F. Let them cool and dry at ordinary room temperature. Complete absence of moisture on the casings is necessary for success. In the case of pork sausage, a cold smoke is maintained: that is, the temperature of the smokehouse should not go above 80 or 90 degrees F. They are dried and smoked but not cooked. Country pork sausage packed in lard, using crocks as containers, is described separately under that head.

The cans used should have perfectly soldered seams. The commercial sizes are usually of 20 and 50-pound capacity. Without oil, Vienna sausage and sausage ends are usually packed in sizes of ½, 1, and 2 pounds.

Put the sausage into the cans cold, filling them without pressing; crimp on the tops, and solder the crimp; fill in the oil or lard hot and solder on the caps. If you have no retort or pressure cooker, place the cans in boiling water at 212 degrees and maintain that heat until they swell; then immediately punch a hole in the top, letting the air out, and quickly solder the hole as soon as the oil or lard appears. In a pressure cooker or retort, hold the cans the length of time suited to the style of sausage and the size of cans, at 240 degrees F. or 10 pounds steam pressure. As soon as the air is out and the puncture soldered, chill the cans in cold water until the ends draw in and look slightly dished or concave. Any that remain bulged are leaky and should be repacked.

Next pass the cans through a hot solution of our Tru-White Washing Powder to remove fat and grease and rinse this off in clear, hot water. The cans are then ready for painting or lacquering and labeling. For a final test, tap the cans on the top and bottom. If this produces a dull sound and the ends are slightly drawn in, they are considered sound. If it produces a hollow, drum-like sound or if the ends are bulging, they should be rejected.

It is possible to can without processing, pouring the oil or fluid lard over the smoked sausages nearly cold, letting them stand a half hour and then topping off with more oil before soldering. Crocks and open containers are sometimes used for this. But such cold-packed sausage should not be stored or held unnecessarily.

The old custom of canning chorizos in lard is the same in that all moisture must first be driven out.

Vienna and Frankfurt sausage may be cut in 2 and 4-inch lengths and put up **without oil.** They are smoked and cooked as for use without canning. Entire links can, of course, be put up in the same manner; but the ends or links in each can should be of uniform length. They are packed in vacuum, sealed and processed in pressure cookers at 235 degrees F. (8 pounds pressure) for 20 to 30 minutes, according to size of cans.

Sausage in Brine or Vinegar

The sausages ordinarily used for preserving in pickle are bologna, frankfurts or wienies, liver, and pork sausage. Either brine or vinegar can be used for packing, the strength depending on whether they are put up for local use or for shipment.

In making the different sausages for packing in brine or vinegar, any of the regular bologna, frankfurt, liver or pork sausage formulas may be used, smoking and cooking in the same manner, if the regular product requires it. No more water should be used in chopping, however, than necessary to prevent heating of the meat.

They are put up in water-tight wooden containers, pails, firkins, barrels, or fractions of barrels ranging down to eighths. Pack to capacity with the required kind of sausage, cover with 40 to 50-degree plain salt brine. Fill packages, put heads in tightly and fill with brine through bung hole. Parts of sausage not entirely covered with brine become moldy; therefore, leakers should be repaired and filled with brine.

30 to 40-grain white wine vinegar can be used instead of salt brine. In many instances this will give much better satisfaction than brine as the sausage will not be so salty.

Bologna Sausage

75 pounds beef trimmings (Freeze-Em-Pickle cured),
15 pounds pork trimmings (Freeze-Em-Pickle cured),
10 pounds pork back fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Bologna Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
½ ounce Zanzibar-Brand Garlic Compound,
Salt to taste,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.
Sufficient cracked ice or ice water to cool the meat while grinding and to give it proper consistency.

The proportions of beef and pork can be varied to suit the price obtained, the demands of the trade, and the material on hand. See examples in the three formulas under "New York Bologna."

How to Prepare

First.—Run the beef trimmings through the 5/64-inch-hole plate of the meat grinder.

Second.—Run the pork through the 1/8-inch-hole plate of the meat grinder.

Third.—Run the fat through the 1/4-inch-hole plate or cut it into cubes by hand or in a fat cutter.

Fourth.—Place all the meats and fat in a mixer or mix by hand, adding all the other ingredients and mixing thoroughly.

Fifth.—Stuff round bologna into beef rounds cut 12 to 16 inches long; long bologna into beef middles cut 12 to 18 inches; and large bologna into beef bungs cut 18 inches long or shorter if they are not to be wrapped with cord. The sausage is then ready for smoking. Puncture all kinds thoroughly to let out the air.

If one has a silent cutter, the sausage is made as follows.

First.—Place the beef in the silent cutter. As soon as this has made one or two revolutions, put in sufficient cracked ice or ice water to prevent the meat from becoming heated. Then add the Bull-Meat-Brand Flour, "B" Condimentine, sugar, Zanzibar-Brand Bologna Sausage Seasoning, and salt to taste. Then add the pork trimmings: add the pork back fat last.

Second.—When properly cut in the silent cutter, the meat is ready for the stuffer: if not properly mixed, put it into the mixer and mix thoroughly or place it in a trough and mix by hand. This meat can be kept from 24 to 36 hours, in tubs in a cooler, at a temperature of 38 to 45 degrees F., until required, and can then be stuffed into casings.

Third.—After the meat is chopped to proper fineness, stuff it tightly into beef rounds, beef middles, or beef bungs. Tie round and long bologna with twine; in the case of round bologna, tie one end, leaving an end of the twine long enough for tying the other when the opposite end of the sausage is bent to meet it. Wrap large bologna with loops 2 inches apart, tied with slip hitch knots. Leave a loop for the sausage stick. Surface dry the sausage at room temperature before smoking. If beef bungs are divided into three or four shorter lengths, wrapping with twine is not necessary.

Luncheon sausage is a name sometimes given to large bologna.

Held Beef.—See our instructions on page 171 for handling and curing meat with Freeze-Em-Pickle for making sausage.

Important.—Since the pure food laws have been enacted, all antiseptic preservatives have been ruled out and cannot be used in sausage. Therefore sausage makers must be careful about the kind of sausage binder they use in their sausage. Many of the binders on the market start fermentation soon after moisture is added to them.

When it is noticed that bologna does not keep as well as it should, the first thing to be looked to is the binder used, as invariably a binder that is not free of the germs of fermentation will cause trouble, and the losses the butcher has from using such binders will amount to more than the saving in the cost of the binder. Many cheap binders can be bought for less money than Bull-Meat-Brand Flour, as they cost less to manufacture. We are not trying to see how cheap a binder we can manufacture: our sole aim in producing Bull-Meat-Brand Flour is to offer the very finest binder, one that will help the sausage instead of souring it.

Garlic Flavor.—If a garlic flavor is desired, add one or two tablespoonfuls of Zanzibar-Brand Garlic Compound while the meat is being chopped. Zanzibar-Brand Garlic Compound is recommended as it does not sour in the sausage, leaves no after-taste and does not taint the breath. It is so finely divided that it readily incorporates with the meats and is thoroughly digested and absorbed. In states where cereal is not permitted, use Zanzibar-Brand Pure Garlic Powder instead of Garlic Compound.

Smoking Bologna

Start the fire in the smoke-house and first dry the sausage with heat before starting the smoke. Then smoke until the desired color is attained. The smoke color on bologna can be much beautified if Zanzibar-Brand Casing Brown Mixture is used, either in the cooking water or in a tank for momentary dipping.

Cooking Bologna

After it is smoked, cook round bologna 30 minutes in water 160 degrees F. and long bologna 40 to 60 minutes, according to the thickness. Cook large bologna from 1¼ to 3 hours in water held at 155 degrees F. Vary the time according to the thickness of the bologna. To determine if bologna is cooked through, drop it on a table: if it rebounds like the inflated rubber inner tube of an automobile tire, it is cooked through; but if it does not rebound, it is not cooked enough. Another method is to cook bologna until it floats.

After they are cooked, place them on a table or hang them up and pour boiling water over them to rinse off the grease. Then pour cold water over them or submerge them for a minute in cold water to shrink the casings and prevent shriveling. After that allow them to cool and dry at work-room temperature, without draught, not less than ¾ hour before placing in the cooler or ice box. It should be dry on the surface before going into the cooler. Maintain a temperature of 40 to 45 degrees F. in the cooler and keep the air as dry as

possible. This will prevent sweating, which would cause slimy mold on the casings. Bleaching too will be prevented.

If a bright brown color is desired, color the cooking water or dip the sausage as described on pages 156 and 158.

The pork back fat or pork speck will be much better for use in bologna and frankfurts if it is dry-salted with Freeze-Em-Pickle and salt, for a few weeks before it is used.

Pressed Bologna Sausage

known also as
New-England Pressed Ham or New-England Pressed Sausage

This is large bologna, described on preceding pages, pressed between boards after smoking and cooking.

Stuff tightly in cap ends of beef bungs up to 18 inches long and puncture well to let out air. Use medium beef bladders if beef bungs are not available. It takes two persons to stuff large sausages: one to hold the bung on the stuffing horn, to prevent the sausage meat from coming out, while the other ties it off at the end of the horn. Tie pressed bologna securely with double weight twine. Then wrap it with heavy flax twine, at two-inch intervals, using slip hitch knots and tying a loop in the flax twine at one end for hanging.

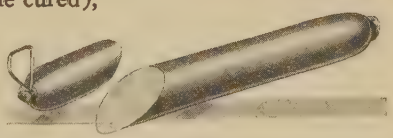
After rinsing and chilling as directed under "Cooking Bologna," place the sausages, between press boards, in a cooler at a temperature of 38 to 40 degrees F., leaving a space of 5 inches between pieces in each layer. On the top board place a weight equivalent to one sausage over each sausage in the top layer.

Leave them in press over night. Then wash with hot water, wipe dry, and put them into a temperature of 40 to 45 degrees F. to be held there till needed.

Weasand Bologna

(In Beef Weasands)

60 pounds beef trimmings (Freeze-Em-Pickle cured),
30 pounds pork trimmings (Freeze-Em-Pickle cured),
10 pounds back or jowl fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Bologna Sausage Seasoning,



¼ to ½ pound "B" Condimentine,
1 tablespoonful Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Chop the beef trimmings very fine in a silent cutter. At the same time add the Zanzibar-Brand Bologna Sausage Seasoning, "B" Condimentine, Zanzibar-Brand Garlic, and Bull-Meat-Brand Flour.

Second.—When thoroughly mixed, add the pork trimmings and allow the machine to make four turns.

Third.—Then add the back or jowl fat, gradually add the ice or ice water, and chop until the fat appears about the size of a pea.

Fourth.—Remove the meat from the machine for immediate stuffing or put into a truck or on shelves in a refrigerator, to be used as needed. Stuff the meat into No. 1 beef weasands, puncturing thoroughly to let air out. Close the open-end with skewer and tie with 3-inch loop for smoke stick.

Fifth.—When stuffed, smoke them until sufficiently smoked.

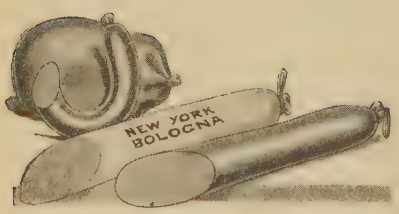
Sixth.—Remove them from the smoke-house and cook them in hot water (155 to 160 degrees) from 40 to 60 minutes, according to the thickness of the sausage. After rinsing with hot water, spray them with cold water. Then hang them at work-room temperature, without draught, till dry on the surface and cooled through, before moving to cooler.

If a bright brown color is desired, color the cooking water or dip the sausage in Zanzibar-Brand Casing Brown mixture as directed on pages 156 and 158.

New York Bologna

(Formula No. 1)

With or Without Garlic



50 pounds beef trimmings (Freeze-Em-Pickle cured),
20 pounds beef or pork hearts (Freeze-Em-Pickle cured),
10 pounds pork cheek meat (Freeze-Em-Pickle cured),
10 pounds jowl fat (Freeze-Em-Pickle cured),
10 pounds fresh plain tripe,
1 pound Zanzibar-Brand Bologna Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Grind all the meat except the jowl fat through the fine plate of the grinder, gradually adding the ice or ice water. Then put it into a sausage mixer.

Second.—Cut the jowl fat into cubes of about ¼ inch. Use a cutter or cut by hand, but do not mash or bruise the fat.

Third.—Then start the mixer and add the above seasonings, Bull-Meat-Brand Flour and jowl fat. Mix thoroughly.

If garlic flavor is desired, add 2 ounces of Zanzibar-Brand Garlic Compound to every 100 pounds of meat.

Fourth.—When mixed remove the meat from the mixer and stuff it into casings. This bologna can be stuffed into beef middles, beef rounds, cloth sacks, or bladders. Tie in rings of about 1 pound with about one inch space of cord between the two ends, that they may hang on the sausage sticks without flattening.

Fifth.—Smoke them until sufficiently smoked, and then cook them.

Sixth.—When cooked, rinse them in boiling water; then dip them in cold water, and hang them up to cool through and dry on the surface before putting them into the cooler.

If a bright and more lasting color is desired, color the cooking water or dip the sausage in a solution of Zanzibar-Brand Casing-Brown Mixture, as directed on pages 156 and 158.

Formula No. 2

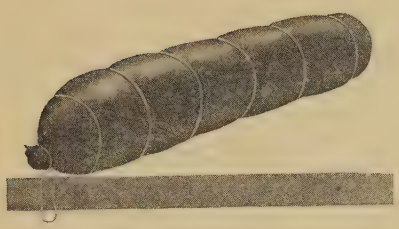
50 pounds beef cheeks (Freeze-Em-Pickle cured),
20 pounds pork cheek meat (Freeze-Em-Pickle cured),
20 pounds fresh plain tripe,
10 pounds jowl fat (Freeze-Em-Pickle cured).

Formula No. 3

40 pounds beef cheek meat (Freeze-Em-Pickle cured),
20 pounds pork cheek or head meat (Freeze-Em-Pickle cured),
15 pounds weasand meat (Freeze-Em-Pickle cured),
10 pounds beef or pork hearts (Freeze-Em-Pickle cured),
15 pounds sweet-pickle-ham fat (cut into ¼-inch squares).

Berliner Bologna

Formula No. 1



75 pounds pork trimmings, (Freeze-Em-Pickle cured),
15 pounds beef (Freeze-Em-Pickle cured),
10 pounds pork back fat (Freeze-Em-Pickle cured),

Formula No. 2

60 pounds pork trimmings (Freeze-Em-Pickle cured),
20 pounds pork cheek meat (Freeze-Em-Pickle cured),
20 pounds fat beef trimmings (Freeze-Em-Pickle cured),

Formula No. 3

35 pounds pork trimmings (Freeze-Em-Pickle cured),
25 pounds pork cheek meat or head meat (Freeze-Em-Pickle cured),
15 pounds tongue and neck trimmings (Freeze-Em-Pickle cured),
25 pounds beef trimmings (Freeze-Em-Pickle Cured).

After the meat is fully cured by the Freeze-Em-Pickle process, mix the beef and pork trimmings with the following ingredients in the proportion given for each 100 lbs. of meat:

1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
8 ounces granulated sugar,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Run all the meat through the 5/64-inch-hole plate of the meat grinder. If one has a silent cutter, the meat should first be run through the ⅜-inch-hole plate of the meat grinder and then chopped in the silent cutter until fine. Add the pork after the other meat, and the fat the last of all. Add all the seasoning as soon as the first meat is put into the cutter.

Second.—Stuff tightly into beef bungs or medium beef bladders. Puncture thoroughly to let out air. Tie with twine and either inclose in wire forms or wrap with ham cord, using slip hitch knots to make loops at three-inch intervals. If bladders are used, the neck should be slit to admit a large enough horn. Skewer before tying. Hold over in the cooler till next day before smoking. When in beef bungs, smoke like large bologna.

Third.—After the sausages are smoked, cook them 1¼ to 3 hours in beef bungs or 4 to 6 hours in beef bladders, according to thickness, at a temperature of 155 degrees F. When cooked, rinse them with boiling water and then with cold water until surface cooled: let them hang at work-room temperature (without draught) until they are

dry and cooled through, not less than 3 hours.

Fourth.—After they have drained and cooled, hang them in a refrigerator or cooler until they are thoroughly chilled and set. They will then be ready for shipping.

Note:—If a nice, rich brown color is required on the casings, cook the sausages in colored water or dip them as directed on pages 156 and 158.

Lebanon Bologna

Formula No. 1

45 pounds beef (Freeze-Em-Pickle cured, free of sinews, but with all the fat left on the meat),
45 pounds pork trimmings (Freeze-Em-Pickle cured),
10 pounds cod fat or flank fat.

First.—Mix the meat and fat together and put the mixture through the ½-inch-hole plate of the meat grinder.

Second.—Put it into a sausage mixer. If one has no power mixer, it may be mixed by turning with a shovel on a table or in a tub by hand. While mixing add:

½ pound granulated sugar,
1 ounce Zanzibar-Brand Chile Powder,
1 pound Zanzibar-Brand Summer Sausage Seasoning,
¼ to ½ pound "B" Condimentine,

Third.—When thoroughly mixed, pack the meat into tierces, barrels or tubs. Pack it down firmly, place it in a cooler and allow it to remain two or three days.

Fourth.—Then remove it from the cooler and put it through the 3/16-inch-hole plate of the meat grinder.

Fifth.—Put the meat into the mixer again, or mix by hand, and stuff it into beef bungs, 14 to 16 inches long.

Sixth.—Hang the sausage in the smoke-house for cold smoking, from 2 to 3 days, with hardwood sawdust. Hang at room temperature till cooled through before putting it into the cooler. This smoked sausage can be manufactured all the year.

If the hardwood sawdust is very dry, dampen it by sprinkling with a little water so that it will smoke and smolder slowly. In sections where people like garlic we advise adding 2 ounces Zanzibar-Brand Garlic Compound to 100 lbs. sausage.

This sausage when smoked has a very dark mahogany color, but it is very palatable. It keeps well and does not mold readily.

Formula No. 2

20 pounds beef trimmings (Freeze-Em-Pickle cured),
50 pounds pork trimmings (Freeze-Em-Pickle cured),
20 pounds pork head or cheek meat (Freeze-Em-Pickle cured),
10 pounds cod fat or flank fat.

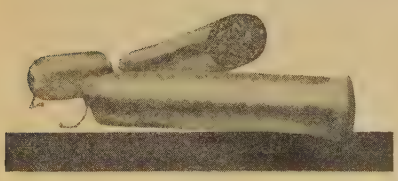
Chop, mix, handle, and smoke as for Formula No. 1.

Formula No. 3

20 pounds beef trimmings (Freeze-Em-Pickle cured),
10 pounds beef hearts (Freeze-Em-Pickle cured),
20 pounds cheek meat (Freeze-Em-Pickle cured),
40 pounds pork trimmings (Freeze-Em-Pickle cured),
10 pounds cod fat or flank fat.

Chop, mix, and add seasonings and ingredients as for Formula No.1.

Bologna in Bags



45 pounds medium fat beef trimmings Freeze-Em-Pickle cured),
20 pounds beef hearts (Freeze-Em-Pickle cured),
25 pounds pork cheek meat (Freeze-Em-Pickle cured),
10 pounds pork back fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Bologna Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
1 tablespoonful Zanzibar Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Put the beef trimmings, beef hearts and pork cheek meat through the ⅛-inch-hole plate of the meat grinder.

Second.—Cut the pork back fat by hand into pieces about the size of a bean or put it through the ¼-inch-hole plate of the meat grinder.

Third.—Place all the meats in a sausage mixer and mix them thoroughly. If you have no power mixer, the meats can be mixed in a pan or tub, by hand.

Fourth.—Stuff into cloth bags of strong material, about three inches in diameter, and about 12 to 14 inches long. Tie with twine with loop for sausage stick.

Fifth.—Hang the stuffed bags in the cooler for two days to cure: then put them into the smoke-house and cook them in a hot smoke, which should take three to four hours. Continue the smoking until the meat is cooked through. Allow the "sausages" to cool through, whereupon they will be ready for sale or shipment.

If colored bags are desired, color them first with Zanzibar-Carbon-Brand Casing Brown Mixture. After the bags are colored, boil

them in water to set the color, and to remove the surplus coloring matter. Rinse well in cold water and let them dry: they are then ready for use.

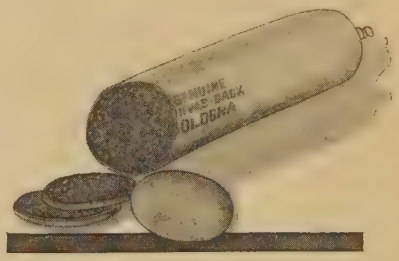
If it is desired to coat the bags with our Zanzibar-Brand Flexine, do so after smoking them. The method is described on pages 161-162.

Another Way

Bologna in bags, after having a cold smoke, should be cooked in water at 150 to 155 degrees F., which will take 2½ to 3½ hours according to thickness. Rinse with hotter water after cooking and hang at work-room temperature at least 6 hours, till thoroughly dry, before coating the sausage with our Zanzibar-Brand Flexine coating.

Canvas-Back Bologna

For Immediate Consumption



50 lbs. beef trimmings (Freeze-Em-Pickle cured),
40 lbs. medium fat pork trimmings (Freeze-Em-Pickle cured),
10 lbs. back fat (dry salted),
1 lb. Zanzibar-Brand Bologna Sausage Seasoning,
¼ to ½ lb. "B" Condimentine,
½ lb. granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

How to Prepare

To cure the meats properly, run the beef and pork separately through the meat grinder, using a plate with 1 to 1¼-inch holes. Then mix thoroughly, with each 100 pounds of the ground trimmings, 1 pound Freeze-Em-Pickle and 1 pound salt. Pack the beef and pork into separate barrels, as described on page 172. It is very important that those instructions be followed to put the meat in proper condition, cure it properly, and give the sausage proper keeping quality.

Tamp down the ground and salted trimmings in the barrels as tightly as possible with a tamper. When almost full be sure to lay a piece of parchment paper or wax paper over the top, to cover the trimmings completely, and spread a sheet of cheesecloth over this paper. Spread about 3 inches of salt on the cheesecloth to keep the air from the meat. If oxygen in the air gets to the meat, it acts on the meat and spoils it: therefore, the tighter the meat is packed and the better it is covered and sealed with salt, the less oxygen will touch it. When the air cannot strike the top of the meat, the meat

will have a better cure and a much better flavor, which will produce a much finer flavored sausage. This applies to all kinds of sausages, except fresh sausage, such as pork sausage, which is made of fresh pork.

It is very little trouble to follow these instructions, and once the sausage maker learns that it is necessary and that it will pay him by turning out a product of better quality, he will be glad to do the little extra work.

In many places trimmings are salted and allowed to stand uncovered, as many sausage makers have been doing for years. When this is done, it breeds millions of germs on top of the meat, the meat becomes slimy, dark and discolored, and has a very disagreeable odor and taste. When this upper layer is mixed through the meat, the germs are distributed through the sausage. With the meat properly covered, as in the Freeze-Em-Pickle cure, the top is just as nice and fresh as the center of the tierce or barrel. It will keep until needed.

Cure the back fat by the dry-salt method described on pages 95 to 97.

When curing the back fat and trimmings, be sure that the temperature of the cooler runs not lower than 38 degrees F., and not higher than 45. A temperature around 40 is best.

First.—After the meat and back fat have been cured from ten to fourteen days, run the beef and pork trimmings through the ⅛-inch-hole plate of the meat grinder, and the back fat through the 3/16-inch-hole plate.

Second.—Place the ground meats and fat in a mixer or mix by hand, and add all of the other ingredients. No salt is added, because the meat has the salt in it when it is put down in cure. When thoroughly mixed, it is ready for stuffing.

Canvas-back bologna is one that customers buy and keep in the house for some time to use whenever they desire it. We therefore advise that no water be added to the sausage. If it is to be used immediately, water may be added, the quantity depending upon the length of time the sausage is to be kept.

Third.—Put the stuffed bags into hot water held at 150 to 155 degrees F., and not hotter. At this temperature it will take two hours to cook the bologna through to the center. If the sausage is very cold when put into the water and the quantity of water not

very large, it may take a little longer than two hours from the time the bologna is placed in the water to the time it is taken out.

The way to tell whether the sausage is cooked through is to drop it on a table. If it rebounds like the air-filled inner tube of an automobile tire, you will know it is cooked through to the center. If it goes down flat and does not rebound, you will know that it is still raw in the center and must be cooked more. The sausage must be cooked through evenly and at the temperature we advise. You will not cook it too much on the outside when it is done in the center; but when boiled at a higher temperature, the outer part gets too much heat, which spoils it.

Fourth.—After the sausage is cooked, pour boiling water over it to wash off all the grease that adheres to the canvas. Then sprinkle with a little cold water and allow the sausage to hang out in the open air until it is dry on the surface and thoroughly cooled before putting it into a dry cooler.

Fifth.—After the sausage has been in the cooler over night, the bags are ready to be coated with a coating like our Zanzibar-Brand Flexine. The method is described on pages 161-162. Flexine is a coating which covers the canvas and prevents the sausage from shrinking. Flexine does not crack: it is pliable, like rubber. When the sausage is eaten, the Flexine is peeled off with the canvas bags. No matter how cold the sausage gets and how much it is handled, the Flexine will not drop off like paraffin.

This sausage is not smoked, but if desired, it can be smoked with a cold smoke, after it is stuffed, so as to give it a smoked flavor. We believe the trade will like it much better smoked and the sausage will keep better if it has a good, thorough cold smoke.

How to Make Canvas-Back Bologna to be Kept a Long Time by the Butcher or by the Customer

First.—Use the proportions of meat given in the foregoing formula and handle the trimmings in exactly the same way, but use no water in this sausage.

Second.—After the sausage is stuffed, pack it into tubs or barrels, and cover it with a brine made as follows:

4 lbs. salt,
1 lb. Freeze-Em-Pickle,
6 gals. water.

Allow this bologna to cure from 8 to 12 days in this brine, in a cooler not any higher than 45 degrees F. The best temperature is

38 to 40 degrees. The length of time to cure the sausage may be varied acording to the length of time the sausage is to be kept after it is made.

Third.—When taken out of the brine, wash each sausage with warm water and a stiff brush: then put into the cooking water and cook as in the foregoing instructions.

Fourth.—After it is cooked, wash off with boiling hot water, then sprinkle with cold water, and allow the sausage to dry. When it is dry, coat with Zanzibar-Brand Flexine, as directed on pages 161-162.

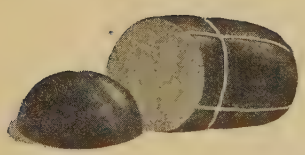
This bologna has wonderful keeping quality, and can be kept for months without spoiling. It will shrink very little and will be delicious eating.

Minced Ham or Minced Sausage

in Beef Bladders

Known Also as Minced Luncheon

Formula No. 1



80 pounds lean pork trimmings, Freeze-Em-Pickle cured,
20 pounds lean beef trimmings, Freeze-Em-Pickle cured,
½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
1 pound Zanzibar-Brand Minced Ham Seasoning,
Bull-Meat-Brand Flour, in the proportion allowed by your state food laws,
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Put the beef and pork trimmings through the 5/64-inch-hole plate of the meat grinder. Add the crushed ice or ice water while grinding.

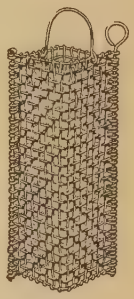
Second.—If one has a power mixer, the ground meat should be placed in it; if not, the meat should be mixed by hand, and the salt, "B" Condimentine, sugar, Zanzibar-Brand Seasoning, and Bull-Meat-Brand Flour added. Mix for a few minutes and when well mixed, stuff through a wide horn into beef bladders, skewer the neck, tie under the skewer, and puncture well to let out air.

If one has a silent cutter, the beef should be put through the ⅛-inch-hole plate of a meat grinder and the pork through a ¼-inch. Then put the beef into the silent cutter, run it around a few times, add the

pork, ice water or cracked ice, the seasonings and other ingredients, and run it two minutes longer. Do not use a mixer after the silent cutter.

Third.—Tie a heavy cord around it in this way: first extend from the top down lengthwise under and back on the opposite side, tying as tightly as possible; then tie lengthwise again, but across the first; finally tie in the opposite direction, around these ties, at the middle.

Instead of cording, minced ham or minced sausage can be inclosed in wire forms while smoking and cooking. It adds to the appearance and causes the sausage to slice in squares.



WIRE FORM FOR MINCED HAM

Fourth.—Place them in the smoke-house and give them a cool smoke, until a nice brown color is obtained.

Fifth.—Then cook them at a temperature of 155 degrees, 28 to 30 minutes per pound of weight. Eight pound pieces should be cooked four hours.

When cooked rinse them with boiling water, submerge them 8 or 10 minutes in cold water to prevent shriveling, and allow them to cool and dry at least 3 hours at work-room temperature. Then place them in a cooler or refrigerator at a temperature of 40 to 45 degrees F. The next day the minced ham or minced sausage will be ready for sale.

To produce a pleasing and permanent casing color, color the water in which the sausages are cooked with Zanzibar-Carbon-Brand Casing Brown Mixture or give them a momentary dip in a solution of it after cooking.

Minced Ham or Minced Sausage

in Beef Bungs or Bladders

Formula No. 2

(A Cheaper Variety)

30 pounds pork cheeks or head meat, Freeze-Em-Pickle cured,
20 pounds No. 2 beef trimmings, Freeze-Em-Pickle cured,
15 pounds tripe trimmings or sheep or beef tripe, fresh,
15 pounds beef cheek meat, Freeze-Em-Pickle cured,
10 pounds weasand meat, Freeze-Em-Pickle cured,
10 pounds sweet-pickle-ham fat, in ⅜ inch cubes,
1 pound Zanzibar-Brand Minced Ham Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
1 pound salt, to taste,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient ice water or cracked ice to cool the meat while grinding and chopping and to give it the proper consistency.

First.—Grind all the beef, except tripe, through the ¼-inch-hole plate of the meat grinder, and the pork through the ¼-inch-hole plate, keeping the two separate.

Second.—Then put all the beef, including tripe, into the silent cutter, and run it a minute while adding the spices, condiments, Bull-Meat-Brand Flour, and part of the ice water or crushed ice. Then add the pork and the remainder of the ice water or crushed ice and run it about 1 minute longer. Then put the chopped mixture into the stuffer.

Third.—Stuff tightly into beef bungs or bladders, puncturing to let out air. Tie double 3-ply twine and either inclose in wire molds or wrap with 6-ply jute twine as for Formula No. 1, using slip hitch knots. Make a loop in the wrapping twine for hanging on sausage sticks.

Fourth.—Hold over night at 36 to 40 degrees F. and then hang, for an hour or so, till dry, in a warm smokehouse with a little fire but no smoke. Then add the saw dust for 2 or 3 hours' smoke, till properly colored.

Fifth.—Cook in water colored with Zanzibar-Brand Casing Brown Mixture, held at 155 degrees F., for 2 to 4 hours, depending on the size. Then rinse in boiling water and submerge in cold water for 8 or 10 minutes, to keep them smooth and plump.

Sixth.—Hang the cooked sausages at work-room temperature till the casings are dry and the sausage cooled through, and then put into cooler.

Minced Ham or Minced Sausage
in Canvas Bags

Use the same ingredients as for stuffing in beef bladders and prepare them in the same manner.

Stuffing.—Stuff tightly into printed canvas bags, to contain about 8 pounds. Tie with two thicknesses of twine, leaving a loop for the sausage stick. It is not necessary to wrap with twine or to use wire frames, though it can be done in the same manner as when stuffed in beef bladders. Give them a cold smoke for 4 to 6 hours.

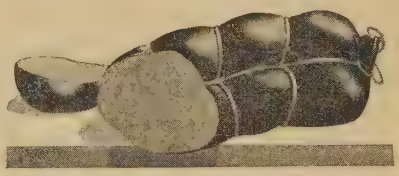
Cooking.—Cook, about 3½ to 4 hours in water held at 155 degrees F. Then pour hotter water over them to clean them. Do not follow with cold water.

Drying.—When rinsed clean, hang them at work-room temperature (70 degrees F.) until the bags are completely dried, which will take

perhaps six hours. They are then ready for coating as described on pages 161-162. Then put into a cooler or ice box kept at 40-45 degrees. They will be ready for sale or shipment the next day.

German Minced Ham or Minced Sausage

(Fleischwurst)



50 pounds beef trimmings, Freeze-Em-Pickle cured,
30 pounds pork trimmings, Freeze-Em-Pickle cured,
20 pounds back fat, Freeze-Em-Pickle cured,
1 pound Zanzibar-Brand Minced Ham Seasoning,
¼ to ½ pound "B" Condimentine,
½ ounce Zanzibar-Brand Garlic Compound,
8 ounces granulated sugar,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Put the beef into a silent cutter and chop until fine, adding the ice or ice water while cutting.

Second.—Then add the pork trimmings, Zanzibar-Brand Bologna Sausage Seasoning, "B" Condimentine, Zanzibar-Brand Garlic Compound, Bull-Meat-Brand Flour, and sugar. Continue running the machine.

Third.—Then add the back fat and allow the machine to run until the back fat appears in pieces of about ¼ to ½-inch.

Fourth.—Remove the mixture from the machine and stuff it into beef bungs about ten inches in length. Prick over all with a needle or sharp pointed fork; then tie in loops with ham cord as shown above. Insert a wooden skewer above the outer tie to prevent the cord from slipping off.

Fifth.—Smoke the sausage in a medium heated smokehouse for about 3 hours.

Sixth.—When smoked, cook it in hot water at a temperature of from 150 to 155 degrees for 2½ to 3½ hours, according to the thickness of the sausage.

Seventh.—When cooked rinse with boiling hot water; then immerse or spray with cold water for a few minutes so that the sausage will set.

Eighth.—Hang up the sausages to cool and dry before putting them into the refrigerator. The next day they should be wiped with a

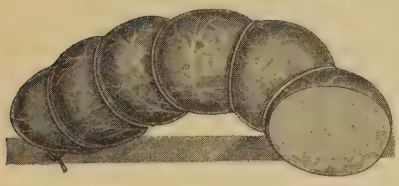
piece of cheesecloth, and rubbed slightly with lard or cotton-seed oil. They are then ready for sale.

If one has only a meat grinder, the beef trimmings can be put through the 5/64-inch-hole plate and the pork trimmings through the ⅛-inch-hole plate of the meat grinder. The Freeze-Em-Pickle cured back fat can be cut by hand in cubes of ¼ inch.

If there is no power mixer, mix by hand in a tub. It is imperative that all seasonings, and especially the Bull-Meat-Brand Flour, be thoroughly mixed.

Luncheon Sausage

(Also Known as New England Sandwich Sausage)



50 pounds pork trimmings (Freeze-Em-Pickle cured),
40 pounds beef trimmings (Freeze-Em-Pickle cured),
10 pounds back fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Bologna Sausage Seasoning,
½ ounce Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Chop the beef trimmings in silent cutter medium fine; then add the pork trimmings and chop both until quite fine.

Second.—While chopping add the Zanzibar-Brand Pork Sausage Seasoning, Zanzibar-Brand Garlic, "B" Condimentine, Bull-Meat-Brand Flour, and ice or ice cold water. Finally, add the back fat and continue chopping until the back fat appears in pieces about the size of a pea.

Third.—After chopping and mixing thoroughly, stuff into beef bungs; tie them well with cord; loop about every three inches; tie a loop at the end by which to hang them up.

Fourth.—Smoke them like large bologna and prick them well with a sharp, thick needle or a sharp-pointed fork.

Fifth.—Cook in hot water, 150 to 155 degrees F., 2½ to 3 hours according to the thickness of the sausage. When cooked, rinse them with boiling hot water and then with cold water to shrink the casing; then hang them up to drain, and allow most of the heat to get out of them before placing them in the ice box or cooler. The next day wipe them with a piece of clean cheesecloth. They are then ready for sale.

If one has only a meat grinder and no power mixer, the meat should be run through the 5/64-inch-hole plate of the meat grinder, and the cured back fat through the ¼-inch-hole plate. The entire mixture can then be placed in a clean pan or tub; the seasonings and other ingredients should be added and mixed by hand.

Jersey Ham or Jersey Pig Specialty

Known Also as Ham Roll and Minced Ham in Canvas Bags

100 pounds pork shoulder or butts,
1½ pounds Ham-Roll-ine,
1½ pounds granulated sugar,
1 pound salt.

First.—Take 100 pounds of lean pork shoulders or butts, having them as free of sinews as possible. They should be about 85 per cent lean and 15 per cent fat. If a greater proportion of fat is used, the rolls will not take on as good a color, and will not be as firm and solid when cured. In warm sections of the country, even less fat is preferable.

Second.—Put the pork through a meat grinder, using ½-inch-hole plate; then put it through the machine again using the ⅛-inch or 3/16-inch-hole plate. Now put the meat into a mixer and add the Ham-Roll-ine, sugar and salt. Let the mixer run until the above ingredients are thoroughly worked into the pork, but do not mix too long. If one has no mixer, the meat must be mixed by hand.

Third.—Spread the mixture 6 or 8 inches thick on boards, and place it in the cooler. Keep it in the cooler at a temperature of 38 to 40 degrees F. for about 24 hours.

Fourth.—Then stuff firmly into heavy canvas bags. The bags should be about 18 or 20 inches long and about 3 inches in diameter.

Fifth.—Hang the bags 3 or 4 inches apart, in a temperature of about 40 degrees, where there is a good circulation of dry air. Let them hang for two to three weeks to cure; then give them a cool smoke for 5 to 6 hours.

Sixth.—After smoking hang them in the cooler for 24 hours, and they will be ready for shipment.

NOTE:—Instead of smoking, the product may be cooked at 155 degrees F., then thoroughly dried, and then coated with our Zanzibar-Brand Flexine, as described on pages 161-162.

Another Way of Making the Preceding

First.—Put the meat through the ½-inch-hole plate of the meat grinder.

Second.—Then mix all the above ingredients with the meat, either in a mixing machine or by hand.

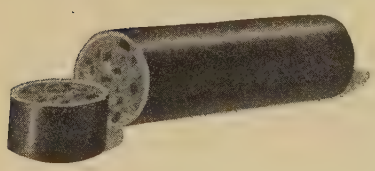
Third.—Put the meat through the ⅛ or 3/16-inch-hole plate of the meat grinder.

Fourth.—Mix the meat sufficiently to bind it. The less the meat is mixed, the better.

Fifth.—Stuff into bags and handle like the above.

HAM-ROLL-INE not only cures the meat, but also gives the ham rolls, minced ham, jersey ham or jersey pig specialty, whichever you wish to call it, a most delicious flavor.

Chicken, Ham and Tongue Delicacy



50 pounds lean pork trimmings (veal can be used), Freeze-Em-Pickle cured,
14 pounds fresh tripe (sinew parts),
14 pounds boiled pig tongue, Freeze-Em-pickle cured,
16 pounds ham (one 16-pound smoked ham),
6 pounds chicken (one 6-pound chicken),
1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
1 ounce green fresh parsley (chopped very fine),
2 tablespoonfuls extract of lemon or grated lemon peel,
½ pound granulated sugar,
Salt to taste,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding it.

First.—Cook the chicken until it is almost cooked through: allow it to cool. When cold, cut the chicken meat into ¼-inch cubes. Grind the fine particles of chicken meat with the pork.

Second.—Cook the smoked ham slowly till almost cooked through—about three-fourths done. When cold, cut the entire ham and fat into ¼-inch cubes.

Third.—Cook the hog tongues slowly until they are cooked through. Remove all the fat, bone and skin and cut them into ¼-inch cubes.

Fourth.—Chop the tripe and pork trimmings, including the trimmings from the tongue and chicken, as fine as possible in a silent cutter or run them through the 5/64-inch-hole plate of the meat grinder.

Fifth.—Mix the meat, the diced chicken, tongue, ham and all other ingredients together thoroughly.

Sixth.—Have a quantity of tin tubes made, 1½ inches in diameter and 6 inches long. Fill the prepared meats into the tin tubes with a hand sausage stuffer, and smooth the end with the palm of the hand. When the tubes are filled, place them in hot water at a temperature of 160 degrees F., for thirty minutes. After they are cooked allow them to cool till they can be handled without burning the hands; then slide the meat out of the tin tubes onto a clean table and allow it to cool.

Repeat filling the tubes and cooking until all the meat is used up; in this way one does not need so many tin tubes.

Seventh.—Allow the cooked portions to become thoroughly cold, occasionally turning them over. Take Freeze-Em-Pickle dry-cured, clear pork back fat, and slice it in strips ⅛ inch thick, 6½ inches in length, and as broad as possible. Place the slices or strips of fat on the cooked cold delicacy lengthwise, covering all sides evenly and covering the ends nicely. Do not handle it any more than is necessary.

Eighth.—Then slide them into weasands which have been previously soaked in warm water. Slip the weasand over a funnel large enough to admit the cooked delicacy with the fat around it without disturbing the latter.

Ninth.—When the delicacy or sausage has been placed in the weasand, tie with cord very tightly between all the individual sausages. Make a loop at the end, prick the weasands well with a needle and hang them up. Continue with this process until all the sausages are in the weasands.

How to Cook Chicken, Ham and Tongue Delicacy

When the Chicken, Ham and Tongue Delicacies are all prepared place them in colored hot water (170 degrees F.), for ten minutes. If the cooking water was not colored, remove them from the kettle and dip them in Zanzibar-Brand Casing Brown Mixture as directed for momentarily dipping frankfurts. See page 163 for directions and follow them, except to make the mixture double strength. Rinse off with hot water; then dip them for a few minutes in ice cold water. This will shrink the weasand and set the fat; then hang them up and allow them to drain and dry; after which place them in a refrigerator and keep them in a cool, dry place.

How to Pack

Pack and ship only as needed, as follows. Separate the individual sausages with a sharp knife where they are tied, being careful not to cut the end of the weasand. Wipe well with a piece of clean cloth. They may then be wrapped in transparent wax paper or tin foil.

Calbassa Sausage

40 lbs. beef trimmings, Freeze-Em-Pickle cured,
20 lbs. pork cheek meat, Freeze-Em-Pickle cured,
40 lbs. pork trimmings (not too fat), Freeze-Em-Pickle cured,
1 lb. Zanzibar-Brand Frankfurt Sausage Seasoning,
8 good size onions (chopped fine),
2 oz. Zanzibar-Brand Chile Powder,
¼ to ½ lb. "B" Condimentine,
8 oz. granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding, and to give it proper consistency.

First.—Run the beef trimmings and pork cheek meat through the 5/64-inch-hole plate of the meat grinder, and the pork trimmings through the ¼-inch-hole plate. When running the meat through the grinder, gradually add the ice or ice water to keep the meat chilled.

Second.—Then put the ground meats in the power mixer and add all the seasonings and other ingredients. If one has no power mixer the mixing may be done by hand in tub.

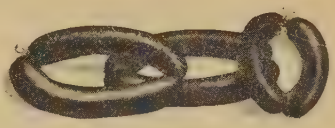
Third.—When the meat and other ingredients are thoroughly mixed, stuff into round beef casings and smoke with warm smoke for three or four hours, until a nice brown color is produced.

Fourth.—Then cook in hot water, at 155 degrees F. for about thirty to forty-five minutes, according to thickness, until the sausage is cooked through.

If the sausages are preferred not cooked in water, they can be cooked in the smokehouse by bringing the temperature up hot enough to cook the sausage and keeping them in that temperature for two hours longer. Cooked in the smokehouse, they will have an entirely different flavor from those cooked in water, but they shrink more. Some prefer one kind and some the other.

Polish Sausage

Formula No. 1



70 pounds pork trimmings, medium fat (Freeze-Em-Pickle cured),
30 pounds beef trimmings (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Polish Style Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
2 ounces Zanzibar-Brand Garlic Compound,
Salt to taste,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Put the beef through the ⅛-inch-hole plate and the pork through the ¼-inch-hole plate of the grinder.

Second.—Put the ground meat into the mixer, add the seasonings and other ingredients. Then mix thoroughly.

If you have no power mixer, place the beef trimmings in a tub or galvanized iron pan, add the seasonings and all other ingredients and the water, and mix together thoroughly.

Third.—Stuff into selected hog casings and twist into links six inches long. Each sausage has two links and the outer ends (instead of being tied) are lapped over so as to prevent the meat from running out. They are then hung with the center over a stick so that the ends hang down on both sides.

Fourth.—Hang the sausage in the smokehouse and smoke it for two to three hours.

Fifth.—Remove from the smokehouse and cook it in hot water from 30 to 40 minutes at a temperature of 150 degrees.

If a rich smoke color is desired, cook the sausages in colored water or dip them as directed on pages 163 to 165.

Formula No. 2

40 pounds beef trimmings (cured two weeks with Freeze-Em-Pickle),
60 pounds pork trimmings (Freeze-Em-Pickle cured).

Formula No. 3

20 pounds beef cheek meat (Freeze-Em-Pickle cured),
20 pounds head or tongue meat (Freeze-Em-Pickle cured),
40 pounds pork trimmings (Freeze-Em-Pickle cured),
10 pounds beef or pork hearts (Freeze-Em-Pickle cured),
10 pounds flank or clod (Freeze-Em-pickle cured).

Formula No. 4

40 pounds pork trimmings (Freeze-Em-Pickle cured),
20 pounds pork head, or ham and bacon trimmings (Freeze-Em-Pickle cured),
40 pounds beef trimmings (Freeze-Em-Pickle cured).

In preparing the above formulas for Polish sausage, the same seasonings are used as directed in No. 1 formula. The rougher the grades of meat, the more seasoning is required, and the quantity to be used should be left to the judgment of the sausage maker. Additional Zanzibar-Brand Garlic Compound may be added, if desired, as the flavor is improved by it.

We advise the sausage maker not to add salt to any of these formulas with Freeze-Em-Pickle cured meats until the mixing is nearly completed; he should then taste it and add salt as needed to make the sausage agreeable in flavor.

Cooking the sausages directly in the smokehouse greatly improves the flavor, but increases the shrinkage. They will, however, keep much longer than those cooked in water after smoking. This is a matter of personal preference and the sausage maker can use his own judgment. For shipping long distances we advise cooking them in the smoke-house.

As previously mentioned, one can produce a very bright color by cooking in colored water. This is fully explained on pages 163 to 165. This coloring process, with Zanzibar-Carbon, is permitted by the Department of Agriculture and can be used in any government inspected packing house in the United States.

NOTE—When Polish sausage is made with large quantities of ham and bacon trimmings, etc., in the formula the moisture is not held in the sausage as well as when made with Freeze-Em-Pickle cured meat. We would therefore recommend the use of more Bull-Meat-Brand Flour when using ham and bacon trimmings.

Galician Sausage

15 pounds beef trimmings, Freeze-Em-Pickle cured,
35 pounds beef or pork cheek meat, Freeze-Em-Pickle cured,
50 pounds pork trimmings, Freeze-Em-Pickle cured,
1 pound Zanzibar-Brand Polish Sausage Seasoning,
¾ to ½ pound "B" Condimentine,
2 ounces Zanzibar-Brand Garlic Compound,
½ pound granulated sugar.
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Grind the beef trimmings, pork trimmings, and the pork cheek through the 5/64-inch-hole plate of the meat grinder.

Second.—Then put all the ground meats into a mixer or mix by hand; while mixing, add all the other ingredients.

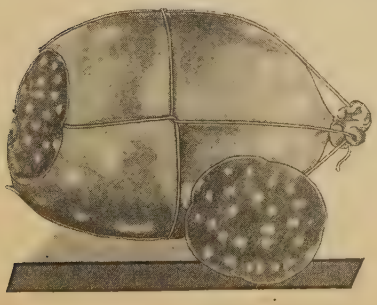
Third.—Stuff into beef rounds, about 17 to 20 inches long; break and link at the middle, leaving plenty of room for the smoke stick, and then tie at the ends.

Fourth.—Hang in the smokehouse at a medium temperature until the sausage has a good smoke color. Then gradually raise to baking heat and hold at that until cooked through.

Fifth.—When done, remove to work-room temperature and let it hang till cooled through before putting it into a cooler.

No effort is made to prevent shriveling, for that is the normal state of Galician sausage. It is much favored at Easter in parts of Poland and western Russia. May be eaten cold or heated in hot water for 15 minutes before eating.

Spanish Mortadella



70 pounds lean pork (free of all fatty parts and sinews), Freeze-Em-Pickle cured,
20 pounds choice beef (trimmed free of sinews and fat), Freeze-Em-Pickle cured,
10 pounds pork fat (Freeze-Em-Pickle cured), cut into pieces about ¼ inch square.

First.—Run each lot of meat through the meat grinder separately and then finish in the silent cutter.

Second.—After the different kinds of meat are chopped or ground very fine, mix the meat and the fat together by hand or in a mixing machine, and while mixing add the following seasonings and ingredients to each 100 pounds of meat.

¼ to ½ pound "B" Condimentine,
8 ounces granulated sugar,
½ pound Zanzibar-Brand Summer Sausage Seasoning,
½ pound Zanzibar-Brand Spanish Sausage Seasoning,
2 ounces juniper berries (crushed),
2 ounces Zanzibar-Brand Garlic Compound,
1 ounce Heller's Rum Flavor,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

Third.—After the meat and spices have been thoroughly mixed, spread five inches thick on clean boards and put these on racks or trucks to cure in the cooler for 24 hours. Keep the temperature at about 38 to 40 degrees for curing this meat.

Fourth.—Stuff into beef bladders, medium and small size. Prick them with a needle or fork to let out the air. Tie crosswise with heavy cord. Then assort the different sizes and hang them so as to keep those of a size on a separate stick.

The best bladders to use are those that have been simply salted. Fresh bladders may be used, but not such as have been blown up and dried.

Fifth.—Hang the mortadella in a cooler for 24 hours at a temperature of 38 to 40 degrees.

After the mortadella have hung in the cooler 24 hours, hang them in the steam room and turn on the steam for drying. During the first four hours use but very little steam, gradually working up the temperature to 120 degrees F. This will cause them to dry properly. When the temperature of the room has reached 120 degrees, keep it at this temperature for 10 hours. Allow it to rise gradually during the following five or six hours to 145 degrees and keep it at this temperature for four or five hours.

It takes from 24 to 30 hours for the mortadella to cook through in this dry heat. After they have been in the steaming room for 24 hours, cut one of the smaller sausages through to the center in order to see if it is cooked thoroughly and so learn by experience the proper length of time required.

The steam room is built like a smokehouse. It should be inside of a building, so that the weather conditions will not affect the temperature of the room. Inside the steam room, have a number of coils

into which the steam is turned. It is best to have coils that can be operated separately for each coil. This will insure an even and more easily controlled temperature.

If the sausage maker has not a cook house or a room equipped with steam coils as above explained, so as to get the proper temperature, the same results can be obtained in a smokehouse by having a hot fire made with coke, but care should be exercised to see that this does not set fire to the smokehouse. Experience, though, will teach the sausage maker how to keep the temperature at the right point in the use of coke heat.

Sixth.—When the mortadella are taken out of the steaming house, they must be covered with cloths, so that they do not dry and cool too quickly, but should sweat and cool slowly.

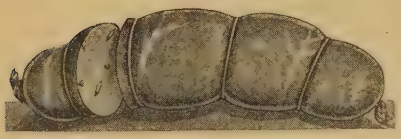
In selecting the fat for making mortadella, take the hard back fat or shoulders or jowls if you can get it, with the soft fat trimmed out of it.

For the pork trimmings used in mortadella it is best to take 50 per cent of ham and 50 per cent of shoulder meat for first-class results. Always see that the meat is thoroughly chilled before chopping and handling. The fat can be prepared dry curing the chunks of fat with Freeze-Em-Pickle for several weeks before working them into sausage. Then scrape off the salt and cut them into squares when ready for use.

The fat for mortadella should be at least one week in cure. All meat for mortadella should be cured with Freeze-Em-Pickle, as it makes a better sausage than fresh meat. In hot weather or in warm climates, prepare the meat, trim and weigh it in a chill room; then take it out and grind and put it right back into the chill room, so that there can be no chance of the meat becoming warm and soft. It must remain chilled and firm at all times.

Never put the spice in with the meat when chopping, but mix it in afterwards, while the meat is being mixed. In hanging the sausages in the smoke-room, hang the smaller ones near the door, because these cook quicker and have to be taken out first. Two or three days after they are cooked, they are ready for home consumption. If they are to be canned, they should hang for five weeks to two months until they are thoroughly dry. Then slice as thinly as possible and pack in cans. These are then soldered up, put into a retort and heated to 220 degrees F. for 20 to 25 minutes. Puncture them and then solder up the puncture. Mortadella treated in this way will keep for many years.

German Mortadella



40 pounds well trimmed beef trimmings of good quality (Freeze-Em-Pickle cured),
45 pounds lean pork trimmings (Freeze-Em-Pickle cured),
15 pounds fresh back fat,
8 ounces granulated sugar,
3 ounces whole black pepper,
2 ounces Zanzibar-Brand Garlic Compound.
1 ounce Heller's Rum Flavor,
¼ to ½ pound "B" Condimentine,
1 pound blanched pistachio nuts,
1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Put the beef and pork through the 5/64-inch-hole plate of the meat grinder, or cut the meat as finely as possible in a silent cutter.

Second.—Take 15 pounds fresh back fat and cut it by hand into ¼-inch cubes.

Third.—Put the meat into a power mixer, or mix by hand, adding the cubes of fat, the nuts, and all other ingredients. When well mixed and the fat thoroughly distributed, it is ready for stuffing.

Fourth.—Stuff into beef bungs, 12 to 14 inches long. Then hang the sausages in the smokehouse and give them a cool smoke for about four hours. At the end of the fourth hour they will be sufficiently smoked.

Fifth.—Then remove them from the smokehouse and put them into hot water at a temperature of 150 degrees. Cook at that temperature, and not higher, for about two to three hours, according to thicknesses, until cooked through. When taken out of the cooking water, wash them first with boiling water, then with cold. Allow them to cool off and dry on the surface before putting them into the cooler or refrigerator. The next day they will be ready for sale.

Sheffield Polony

65 pounds pork trimmings (Freeze-Em-Pickle cured),
25 pounds beef trimmings (Freeze-Em-Pickle cured),
10 pounds pig hearts (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Bologna Seasoning,
¼ to ½ pound "B" Condimentine,
8 ounces granulated sugar,
Salt, to taste,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Run all the meat through the 5/64-inch-hole plate of a meat grinder or chop it finely in a silent cutter.

Second.—Add all other ingredients to the chopped meat and mix well by hand or in a power mixer. With a silent cutter it can be mixed and chopped at the same time. If run through a meat grinder the meat can first be well mixed by hand.

Third.—After it is ground, mix well by hand: it is then ready to stuff.

Fourth.—Stuff into beef round casings, and tie off in one-pound rings, bringing both ends tightly and snugly together.

Fifth.—Cook in hot water at 155 degrees F. for 20 to 30 minutes, according to thickness. When cooked pour boiling water over them or dip in boiling water; then pour cold water over them or place them in cold water for a few minutes. Then remove them and lay them on a table to cool for about 30 minutes.

Sixth.—Lay the sausages—don't hang them up—on clean burlap or canvas in a cool place where there is plenty of fresh air. After 30 minutes, turn them over and allow them to remain for 30 minutes more. Then they can be hung up in a refrigerator or cooler. When cold they are ready for sale. This sausage is not smoked. It is eaten cold and is excellent for picnics and luncheons, and most delicious for sandwiches.

New England Prepared Luncheon

(Also Known as New England Pressed Sausage)

First.—Take 90 pounds of cured pork cut into pieces weighing from one to four ounces each: lean shoulder meat is the best. The proper cure is given on the next page.

Second.—Take 10 pounds of beef trimmings that have been cured with Freeze-Em-Pickle in the manner shown on the next page and run them through the 5/64-inch-hole plate of the grinder; then mix this with the 90 pounds of cured pieces of pork.

Third.—When it is well mixed it is ready to stuff into beef bungs, 12 to 14 inches long. Wrap them with heavy twine or ham cord at intervals of two to three inches.

Fourth.—Smoke them for about three hours. Then cook them at a temperature of 155 degrees two to three hours, according to size and thickness.

Fifth.—Then lay them on boards in the cooler and put another board on top of them with heavy weights to press them like head-cheese. After they are thoroughly cold, hang them in a cooler or refrigerator over night, and smoke them again the following day; smoke in a cold smoke for eight to ten hours. When cooled they will be ready for sale.

How to Cure Meat for New England Prepared Luncheon or New England Pressed Sausage

The Freeze-Em-Pickle process is especially adapted for curing ham trimmings which are used for New England prepared luncheon, New England pressed ham sausage, etc. It will cure and preserve ham trimmings perfectly, and will give a rich, delicate sugar-cured ham flavor. It does not draw the albumen out of the meat, but the natural binding qualities are retained, and the meat retains a rich, cured-meat color.

Trimmings that are to be held for any great length of time must be as fresh as possible. However, only the best quality trimmings should be used for this product.

It is absolutely necessary that the meat should be thoroughly chilled and that the packing should be done in the cooler so that the temperature in which it is to be cured may be correct.

Directions must be carefully followed to obtain the best results:

First.—The trimmings should be in pieces of one to four ounces each and should be as uniform in size as possible.

Second.—For each 100 pounds of trimmings, take

1 pound Freeze-Em-Pickle,
1 pound best granulated sugar,
2 pounds common salt.

Mix these ingredients thoroughly with the meat. Thorough mixing is very important to insure a uniform cure.

Third.—Have the tierces or barrels perfectly clean and sweet, sprinkle a little salt on the bottom, and fill them about one-quarter full of salted meat; then pound it down hard with a tamper. Do the same when the barrel is half full, and continue in this manner until the barrel is filled. This tamping is done to expel the air between the pieces of meat, and it is an important factor in obtaining a uniform cure and color.

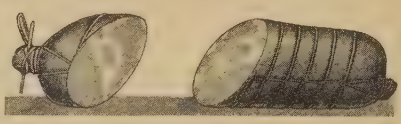
Cover the meat with a piece of parchment paper, put a piece of cheesecloth over this, spread a layer of salt, two to three inches thick, over the cloth and fold in the overhanging edges. This will keep out the air and give good results. The salt in the cheesecloth is not lost and may be used again. The trimmings will be cured in from two to three weeks, and are then in perfect condition to be made into New England pressed ham, etc. Do not soak in water nor add any salt, as they are ready for instant use just as they are and will have a delicious sugar-cured ham flavor.

Cure meats as near 38 to 40 degrees F. as the equipment permits.

Boneless Butts in Beef Bungs

(Also Known as "Rolled Boneless Butts" and "Butt Sausage")

Use boneless pork shoulder butts, fully cured with Freeze-Em-Pickle in the manner shown on page 90.



First.—On taking the butts out of cure, soak them for 5 minutes per day in cure, in cold water.

Second.—Stuff into beef bungs, one large butt or two small butts into each casing. If the casings are large, more may be stuffed into them, one butt after another, according to the length of the bung. Fasten both ends with wooden skewers and tie under the skewers with 3-ply twine, forming a loop at one end for hanging on the smoke stick. Perforate the casing well with a fork to let out air and hang at work-room temperature an hour or two for partial drying.

Third.—Hang in a cool to medium smokehouse until dry or about 2 hours. Then add sawdust and smoke about 7 hours or till the desired color is reached.

Fourth.—After smoking, wrap tightly with 3-ply twine, once around the bung lengthwise and then around the sides, the loops a half inch apart and securely knotted.

Fifth.—The rolled butts are usually sold uncooked. If cooked, however, the wrapping should be done as quickly as possible, to avoid delay, between smoking and cooking. The cooking should be done at 160 degrees, about 30 minutes for the pound in each piece. Much shrinkage in the smokehouse can be avoided if the cooking water is

colored with Zanzibar-Carbon-Brand Casing Brown Mixture. This produces a beautiful smoke color that will not bleach out.

Sixth.—After cooking, spray or rinse the rolled butts with boiling water and then immerse them a few minutes in cold water to prevent shriveling. Let them hang at work-room temperature to dry and cool before putting them into the cooler.

Capicola

Cure and soak as for boneless butts in beef bungs. Sprinkle the wet butts with our Zanzibar-Brand Spanish Sausage Seasoning in the following proportion.

For each 100 lbs. butts, use: 1½ lbs. Zanzibar-Brand Spanish Sausage Seasoning.

Stuff into beef bungs, tie and puncture as for boneless butts in beef bungs. Smoke about 12 hours in a cool smoke. Then wrap with flax twine, like boneless butts, and hang in summer-sausage dry room, at a temperature of not over 56 degrees F., for 10 to 14 days or till as dry as local trade demands.

Lachs Schinken

(Boneless Pork Loins in Beef Bungs)

First.—Take boneless pork loins and cure them in brine, using regular ham pickle, made as follows.

For each 100 pounds of boneless pork loins, use
- 8 pounds common salt,
- 1 pound Freeze-Em-Pickle,
- 1 to 2 pounds best granulated sugar,
- 6 gallons cold water.

Cure small boneless loins (3 to 5 pounds) 18 to 22 days,
Cure medium boneless loins (6 to 7 pounds) 23 to 25 days.
Cure large boneless loins (8 to 10 pounds) 26 to 30 days.

Overhaul on the third, sixth and tenth days.

Second.—After the pork loins are fully cured take them out of the brine and wipe them perfectly dry; then double two together and stuff them into a beef bung casing.

Third.—Prick all parts of the casing so as to let the air out; tie as tightly as possible with ham cord, as shown in the illustration.

Fourth.—Hang them in a dry refrigerating room that is well ventilated and allow them to dry for a day or two. Then hang them in

the smoke-house and give them a cold smoke. After they are thoroughly smoked, place them in a dry room again for a day or so before offering for sale.

Lachs Schinken is eaten raw. It is simply sliced and served as it is, without cooking, and therefore the meat must be fully cured and pretty dry, nearly as dry as dried beef.

Beef Sausage (Unsmoked)

65 pounds beef trimmings, Freeze-Em-Pickle cured,
20 pounds jowl or back fat, fresh,
15 pounds plain fresh tripe,
1 pound Zanzibar-Brand Hamburger Seasoning,
½ ounce Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
1 pound salt to taste,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and give it the proper consistency.

First.—Cut the tripe into pieces about 1½ inches square.

Second.—Mix together the beef, tripe and all other ingredients except the fat. Then run the mixture through the 5/64-inch-hole plate of the meat grinder.

Third.—Put the fat through the ¼-inch-hole plate of the meat grinder.

Fourth.—Now add the ground fat to the mixed meats and seasonings; mix together and stuff into round beef or large sheep casings, making them in links about 4 inches long.

This sausage is sold fresh, not smoked. Before eating it simply place in hot water and boil slowly for 15 to 20 minutes; serve with horseradish. This will be found a very delicious sausage.

Vienna or Frankfurt Sausage

(Known also as "Wienies," "Half Smokes," and "Red Hots")

Vienna or Frankfurt sausage is the most popular in the smoked and cooked class. We could give twenty different formulas or mixtures, but have selected only the better of the well tried. They can be made of all pork or all beef: the higher grade sausages are very much improved by adding veal trimmings. The manufacturer must regulate the proportions of the various meats prescribed in the formulas to suit the price obtained, the demands of the trade, the kinds and quantities of material on hand. The object is to produce a tender, juicy, palatable sausage of good flavor. Proper seasoning is the main thing in making frankfurts.

There is a slight difference between Vienna sausage and Frankfurt sausage. Vienna sausage usually has a garlic flavor, while the frankfurt, as a rule, has not. Most sausage manufacturers in the United States make no distinction at all. They use garlic flavor in both or in neither, according to their own individual taste and the demand of the trade.

The following formulas, when used according to our instructions, will produce the best Vienna and Frankfurt sausage. Of course, the proportions of meats can be varied according to meat on hand.

Formula No. 1

25 pounds pork trimmings (Freeze-Em-Pickle cured),
75 pounds beef trimmings (Freeze-Em-Pickle cured).

Formula No. 2

40 pounds pork trimmings (Freeze-Em-Pickle cured),
15 pounds pork hearts (Freeze-Em-Pickle cured),
10 pounds pork cheek or head meat (Freeze-Em-Pickle cured),
35 pounds beef cheek meat (Freeze-Em-Pickle cured).

The above formulas provide for the use of Freeze-Em-Pickle cured meats as this gives the best results. See directions on pages 170 to 174 for curing meat for bologna, frankfurts and other sausage.

Directions for Seasoning, 100-lb. Formula Made with Freeze-Em-Pickle Cured Meats

1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
2 ounces Zanzibar-Brand Garlic Compound (if garlic flavor is desired),
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

Directions for Seasoning, 100-lb. Formula Made with Fresh Meats

If you have not the Freeze-Em-Pickle cured stock on hand, season as follows:

1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
1 to 2 pounds salt,
1 pound Freeze-Em-Pickle,
½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
2 ounces Zanzibar-Brand Garlic Compound (if garlic flavor is desired),
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

Frankfurt sausage is usually made in exactly the same manner as bologna with the exception that it is chopped finer and Zanzibar-Brand Frankfurt Sausage Seasoning is used. A good proportion for Frankfurt sausage is, three parts of beef and one part of pork. Veal improves Frankfurt sausage considerably, but the price of veal is so high that it is very seldom used.

The fat portion of the trimmings can be left on. The meat for Frankfurt or Vienna sausage must be chopped very fine, and it is best when chopped in a silent cutter. When using hearts, head meat or beef it should be chopped first, separately, before the pork is added. The ice or ice water should be added, a little at a time, during the process of chopping or grinding: the seasonings should be added as soon as the meat is put into the chopper. If, instead of chopping, it is ground in a meat grinder, use the 5/64-inch-hole plate and put the meats through once. Then put the material into a sausage mixer, if you have one, or mix by hand in a tub, adding the seasonings, the Bull-Meat-Brand Flour and the water while mixing.

After mixing the meat it is ready to fill into sheep casings or into narrow hog casings. Link in sizes to suit, using linking blocks for greater uniformity. (See page 167.)

If the meats were fully cured according to directions, the sausage will be ready for the smokehouse after stuffing.

How to Smoke Frankfurts or Vienna Sausage

Cut the frankfurts or Vienna sausage in four-link lengths and hang these ½ inch apart over sausage sticks. Put them into a smokehouse and smoke until the desired color is reached. The heat of the smokehouse will be governed by the proportion of fat or pork used in the sausage. Too much heat melts the fat and causes it to escape through the casings.

When the sausages are smoked remove them from the smokehouse. Take heavy ham cord and tie from six to ten chains of the sausage together, with a loop about 3 inches in diameter, large enough to hang on the sausage sticks. When this is done and all the sausages are tied in bunches they are ready for cooking. This method of tying prevents the sausages from floating or dropping off the sticks while cooking and keeps them submerged under water during the entire cooking process.

How to Cook Frankfurt or Vienna Sausage

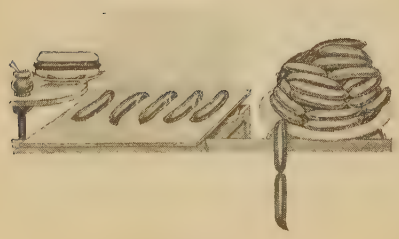
When the Vienna or Frankfurt sausages are smoked and tied as directed, place them in a cooking vat of hot water and cook at a temperature of 160 degrees F. for ten to fifteen minutes, according to the size or thickness of the sausage. Then wash them with boiling water and rinse with cold water. Some sausage makers have installed a shower bath in their sausage department, the sausages being hung on iron cages when they come out of the cooking vat and run under the shower. Attached to the shower or sprinkler is a combined hot and cold water pipe. First hot water is run on them to wash off any grease which may be on the sausages and then they are rinsed by turning on the cold water. This shrinks the casings, makes them nice and plump, and removes any wrinkles in the sausage. Let them hang at room temperature till the casings are dry and color is developed before putting them into the cooler.

If a light brown color is desired, color the cooking water or momentarily dip them in a solution of Zanzibar-Carbon-Brand Casing-Brown Mixture, as described on pages 163 and 164.

Coney Island Red-Hots

For Sandwich Stands

Frankfurts That do Not Shrink on the Hot-Plate



Roasting frankfurts (or wienies) on a hot-plate, as done on sandwich stands, requires a different formula than a sausage intended for stewing. Offal, particularly tripe, and soft fats cannot be used. It should be made chiefly of lean meat and ¾ of that should be beef.

75 pounds lean beef trimmings, lean bull meat, or beef cheek meat (Freeze-Em-Pickle cured),
10 pounds pork cheek meat or other lean pork (Freeze-Em-Pickle cured),
15 pounds pork trimmings, half fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient ice water or cracked ice to cool the meat while grinding and to give it the proper, sticky consistency.

In this sausage it is important that the meats be cured by the Freeze-Em-Pickle process. By other methods of curing the meat becomes "short" if not promptly used as soon as cured.

First.—Put the beef and the cheek meat through the smallest hole plate of the meat grinder twice and the pork trimmings once. If you have a silent cutter, it is better to put the meat through the ¼-inch-hole plate of the grinder first and then to finish very fine on the silent cutter. Use part of the needed water in grinding or chopping.

Second.—Put the ground or chopped meat into the power mixer or mix in a tub by hand. Add all ingredients and the rest of the ice water here and work the mixture till smooth, plastic and sticky.

Third.—Stuff into medium size sheep casings, link in 4-inch lengths and hang on smoke sticks in such a way that the sausage will hang the length of two links (8 inches).

Whatever is left over after stuffing may be spread, 8 or 10 inches deep, on shelves or in a tub or truck, and put into the cooler. It will keep 4 or 5 days, and as much of it as needed can be stuffed each day. Before stuffing, mix again until it has an even color and smooth appearance, adding more water if the meat is too stiff.

Fourth.—When stuffed, put the sausage into a warm smokehouse, without smoke, until the casings are entirely dry outside. Then add the sawdust and smoke, while gradually increasing the temperature, until the desired color is reached. Too much heat melts the fat and causes it to escape through the casing. It is better to finish the coloring with Zanzibar-Carbon-Brand Casing Brown Mixture, either by momentary dipping or by adding the color to the water in which the sausage is cooked.

Fifth.—Move the sausages directly from the smokehouse to the hot water. Cook at 160 degrees, about 10 minutes. Then rinse in boiling water and, immediately after, shower with cold water.

Sixth.—Let it hang at work-room temperature till the casings are dry before hanging in the ice box. Before packing for shipment, hang the sausage again at work-room temperature to sweat and dry.

This sausage is known as Coney Island red-hots, suitable for restaurants, lunch counters, roadside stands, parks, picnics, beaches and ball games.

How to Get Out Rush Orders for Frankfurts, Coney Island, Vienna and Kosher Frankfurt Sausages

All the formulas in this book for smoked sausage are written to make the sausage of Freeze-Em-Pickle process cured meat. We have found from the tests we made in the different sausage factories and packing houses, that by first curing the meat by the Freeze-Em-Pickle process a much larger per cent of sausage is produced out of the same quantity of meat than by working it up fresh. As this is the only economical way to make it, as well as the most profitable, we therefore recommend this as the best method.

In many instances, however, it is impossible to carry a stock of Freeze-Em-Pickle process cured meat, and sausage must be rushed out in a hurry. In the East where large quantities of Coney Island sausages are made, the sausage maker never knows what orders he is going to get, at any minute, to deliver a certain quantity by express, just as fast as they can be delivered. He must, therefore, always keep a supply on hand.

If this is the case, and one hasn't the cured meats to make the frankfurts, wieners, kosher frankfurts and similar sausages of, we advise making up the sausages out of fresh meat, putting the Freeze-Em-Pickle and "B" Condimentine in it, stuffing the sausages and hanging them in the cooler to remain there several days, if necessary. By using Freeze-Em-Pickle and "B" Condimentine, a sausage maker can carry as many thousand pounds of frankfurts, wieners, Coney Island sausage, or kosher frankfurts in this way as he desires. Every day, as the orders come in, he can take them out of the cooler, hang them in the smokehouse for smoking, cook them and then ship them to the customers. From day to day he can make enough to replace those used, and simply carry a safe surplus to work from.

Danish Vienna or Frankfurt Sausage

(Wienerpölse)

55 pounds pork trimmings (Freeze-Em-Pickle cured),
30 pounds veal trimmings (Freeze-Em-Pickle cured),
15 pounds pork back fat (Freeze-Em-Pickle cured),
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
2 ounces Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Put the pork and veal trimmings through the 5/64-inch-hole plate of the meat grinder.

Second.—Put the pork back fat through the ⅛-inch-hole plate of the meat grinder.

Third.—Put the meat into a mixing machine with all the above ingredients and mix thoroughly, or put it into a tub and mix by hand.

Fourth.—Stuff into sheep casings and link off 5 inches long, the same as frankfurt sausage.

Fifth.—Now hang them in the smokehouse and give them a hot smoke. Thoroughly smoke the sausages till smoked through and partly cooked from the heat in the smokehouse. Let them cool at room temperature before putting them into the cooler. They are then ready for sale.

These sausages are not boiled by the sausage maker, but when the customer gets them they are put into hot water for about ten minutes and slowly cooked before serving.

English Saveloys

60 pounds beef trimmings (Freeze-Em-Pickle cured),
20 pounds hog cheek meat (Freeze-Em-Pickle cured),
20 pounds hog skins (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand English Breakfast Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
8 ounces granulated sugar,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Wash the salt off the skins and place them in a jacketed kettle or in a kettle over a fire; put in just enough water to cover them and cook at a temperature of 180 degrees F. for 1½ to 2 hours, until tender.

Second.—Then run the cooked hog skins through the 5/64-inch-hole plate of the meat grinder and the beef and pork through the ⅛-inch-hole plate.

Third.—Mix all together by hand or in a mixing machine, adding the soup the skins were cooked in. When thoroughly mixed, it is ready to be stuffed into hog casings.

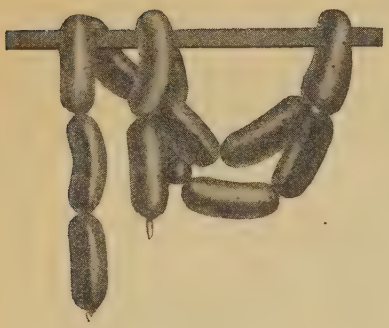
Fourth.—After stuffing, tie off in links about four inches long until you have eight links. Then connect the two ends together with stout

twine about four inches apart, to bridge the stick in hanging. Prick well with a sharp needle to let out the air; then give the sausage a hot smoke for two hours.

Fifth.—When smoked, cook in hot water at 155 degrees from 20 to 30 minutes, according to the thickness of the Saveloys. If a bright smoke color is desired, color the cooking water as directed on pages 163-164. Then hang them up, rinse them with hot water, and follow with a cold rinse. Allow them to cool for one hour, then put them into the refrigerator and the next day they will be ready for sale.

Saxon Garlic Sausage

(Knackwurst)



20 pounds beef trimmings, cured with Freeze-Em-Pickle,
60 pounds pork shoulder trimmings, cured with Freeze-Em-Pickle,
20 pounds pork back top fat, Freeze-Em-Pickle cured,
1 ounce whole caraway seeds,
8 ounces granulated sugar,
2 ounces Zanzibar-Brand Garlic Powder,
1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—If you have a chopping machine, chop the beef first, very fine; then add the pork trimmings and chop until they are fine; then add the pork back fat, after cutting it by hand in ⅜-inch cubes. Keep cutting until the fat appears about the size of a small pea.

Second.—While cutting, add all other ingredients and as much cracked ice or ice water as the meat will absorb nicely, but not too much.

If you have only a meat grinder, put the beef or pork through the 5/64-inch-hole plate. The fat should first be chilled hard and then cut through the 3/16-inch-hole plate of the meat grinder. The fat should always appear in pieces the size of a small pea.

Third.—Stuff into hog casings and tie with thin twine in links of four inches. These sausages must be plump, and the casings well filled without air spaces between the meat and casings.

Fourth.—Smoke in a cool smoke from three to four days. The sausage will then be ready for sale.

Danish Hard Smoked Link Sausage

(Knaekpölse)

40 pounds beef trimmings, Freeze-Em-Pickle cured,
50 pounds pork trimmings, Freeze-Em-Pickle cured,
10 pounds pork back fat, Freeze-Em-Pickle cured,
2 ounces Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine,
1 pound Zanzibar-Brand Frankfurt Sausage Seasoning,
½ pound granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Run the beef and veal through the 5/64-inch-hole plate of the meat grinder.

Second.—Run the pork through the 3/16-inch-hole plate of the meat grinder.

Third.—Run the pork back fat through the ¼-inch-hole plate of the meat grinder.

Fourth.—Now place the ground meat with all the other ingredients in a mixer or mix by hand in a tub.

Fifth.—Stuff into hog casings and link off about 6 inches long.

Sixth.—Then hang them in the smokehouse and give them a hot smoke until the sausages are thoroughly smoked through.

Seventh.—After smoking allow them to cool and then they are ready for sale.

When these sausages are to be eaten, place them in hot water and cook very slowly for about 12 to 15 minutes, just letting them simmer. They are to be served hot.

Hamburger Sausage or Hamburger Steak

On the next pages we give the recipe for a new sausage that is well liked, and we advise every butcher to make use of it. This sausage is a success, takes well with the trade when made up right and is very easy to make. It is a "nice eating" sausage and customers are always pleased to get something new for a change. Making hamburger sausage gives butchers a profitable outlet for all small pieces of beef and a large percentage of beef fats, which are often not easily sold otherwise.

Formula for Making Hamburger Sausage

(Also Known as Hamburger Steak)

80 pounds lean beef trimmings (fresh),
20 pounds beef fat or fat beef (fresh),
6 to 8 ounces Zanzibar-Brand Hamburger Seasoning,
1 pound Freeze-Em-Pickle,
5 pounds large size onions, chopped into pieces of about ⅛ inch,
½ pound granulated sugar,
1 pound salt,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Take 80 pounds of lean beef trimmings, remove all sinews, and cut the meat into small pieces.

Second.—Spread the meat on a table and sprinkle over it one pound of Freeze-Em-Pickle and one pound of salt to 80 pounds of meat. Mix thoroughly so that the Freeze-Em-Pickle may get to all parts of the meat; then run the meat through the ¼-inch-hole plate of a meat grinder.

Third.—Pack the meat in tubs or boxes not deeper than six inches and place in the cooler; allow it to remain there at least one to two days to cure.

Fourth.—After the beef is cured take 20 pounds of suet beef fat (from the brisket is the best) or fat flanks and cut it up with five pounds of onions and run the beef fat and onions through the ¼-inch-hole plate of the meat grinder; then mix the ground beef fat with the 80 pounds of cured beef.

While mixing add the Bull-Meat-Brand Flour, 6 to 8 ounces Zanzibar-Brand Hamburger Seasoning and add enough cold water or ice to give the meat the proper consistency.

Fifth.—Mix the beef, suet, Bull-Meat-Brand Flour, seasoning and water together as well as possible and then run it through the meat grinder again, using the ⅛-inch-hole plate.

Sixth.—After the sausage is ground, spread it on platters and decorate it nicely with parsley and a few pieces of sliced lemon or orange, which adds to its attractiveness.

Notice.—This kind of sausage can also be made without curing the meat in advance if one prefers.

Simply mix the beef, fat, Bull-Meat-Brand Flour, Zanzibar-Brand Hamburger Seasoning, finely cut onions, sugar, Freeze-Em-Pickle and salt all together, run it through a grinder, adding the water while grinding and mixing, and when ground it is ready for sale. This sausage will, however, have a different flavor than when made of cured meat as above.

With each can of Hamburger Seasoning, we furnish some of these cards free. Take a beef skewer, split the end of it that the card may be inserted in the slit and then stick this skewer into the platter of hamburger sausage. This little card will help the sale and one will be surprised at the many compliments he will receive on this new sausage. We will gladly furnish as many of these cards as are desired, free of charge to any butcher who is using our Hamburger Seasoning.

How to Season Hamburger to Make It More Palatable and Pleasing

A very successful way of increasing trade in hamburger is to season it with one ounce of Zanzibar-Brand Hamburger Seasoning to every 25 pounds of meat. This gives the meat a delicious flavor, makes it more palatable and pleasing to the taste and much more appetizing and satisfactory to the customer.

Sometimes hamburger made without seasoning has a peculiar flavor and meat odor which many customers object to. This trouble is overcome by seasoning hamburger with our Zanzibar-Brand Hamburger Seasoning, as it gives the meat a delicious flavor and aroma.

The use of this seasoning will increase the sale of hamburger.

Pork Sausage

100 pounds fresh pork trimmings, about one-fourth fat, or boneless pork shoulder meat,
1 pound Zanzibar-Brand Pork Sausage Seasoning (either with or without sage),
¼ to ½ pound "A" Condimentine,
About 2 pounds salt, to taste,
Bull-Meat-Brand-Flour, in the proportion allowed by your state food law,
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Retrim and inspect the pork trimmings or pork shoulder meat. Remove all gristle, skin, bones, blood specks, clots, or anything which may have an objectionable appearance.

Second.—If you have a meat grinder and a sausage mixer, run the meat through the 3/16-inch-hole plate of the grinder, adding the cracked ice or ice water while grinding the meat. Then put it into the sausage mixer and add, while the machine is running, the Zanzibar-Brand Pork Sausage Seasoning, the "A" Condimentine, the crushed ice or ice water, and the Bull-Meat-Brand Flour. Salt and mix for only a few minutes, and if it is to be stuffed into casings, stuff it immediately after mixing.

Third.—If one has only a meat grinder and no mixer it is best to mix the meat by hand, putting the pork trimmings into a galvanized iron pan or wooden tub, and mixing all the ingredients together. When mixed thoroughly, run it through the ½-inch-hole plate of the meat grinder; then mix it a second time, and run the meat through the 3/16-inch-hole plate of the meat grinder: it will then be ready for stuffing, or for packing in loose form and shipping. Casings must be absolutely dry before packing pork sausage for shipment.

Fourth.—If the sausage meat is to be sold or shipped in loose or bulk form, weigh it out in the quantities desired and immediately pack and place it in a cooler or refrigerator, in a dry place. Allow it to remain at low temperature until sold or shipped.

Some sausage makers put loose or bulk pork sausage meat into 6 and 10-pound earthenware crocks; also in paper cartons and wooden boxes lined with parchment paper and into 1, 2 and 3-pound cotton sacks.

When this sausage meat is to be stuffed into casings, for fresh link sausage, medium wide and narrow hog casings can be used. Medium and wide sheep casings are used in making what is known as small-link pork sausage. In some sections the seasoned and mixed sausage

meat is shaped in one-pound rolls and wrapped in corn shucks, tied at both ends with twine.

When stuffed into sheep casings very fancy packages are usually made. A good method is to put them up in one-pound packages, using fancy cardboard boxes, lined with parchment paper, with the maker's name and brand printed thereon.

Success is bound to follow the sausage maker who adheres strictly to the formulas given in this book.

Farm Pork Sausage

100 pounds fresh pork trimmings, about one-fourth fat (ham trimmings are the best),
1 pound Zanzibar-Brand Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
2 pounds salt.
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.
Sufficient crushed ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Trim the fresh trimmings carefully, leaving a fair proportion of the solid fat on the lean.

Second.—Cut the trimmings by hand in inch pieces, or run it through the meat grinder, using a plate with one-inch holes.

Third.—Then mix thoroughly, by hand, the fresh pork trimmings with the Zanzibar-Brand Pork Sausage Seasoning, "A" Condimentine, and salt. Then pack the meat firmly into clean wooden or galvanized iron tubs. When this is done cover the top with clean parchment paper and place the sausage meat in a refrigerator or cooler. It can remain in the refrigerator from 24 to 48 hours, until wanted.

Fourth.—When the meat is required, mix the Bull-Meat-Brand Flour into it.

Fifth.—Then put the meat through the ¼-inch-hole plate of the grinding machine. When the meat comes out of the machine it will be observed that the fat and the lean are all of one size, and that the fat is not mashed. It is then ready for stuffing. Do not handle with the hands any more than can be helped.

Sixth.—The farm sausage can then be stuffed into hog casings or one and two-pound linen sacks. It may also be formed into one-pound bricks like butter, wrapped in parchment paper and packed into nicely printed cartons.

This formula makes a very high-grade farm pork sausage. It has been thoroughly tested, and is being used by the manufacturers of one of the most popular farm pork sausages in the United States.

Country Pork Sausage

(Packed in Lard)

100 pounds fresh pork trimmings (fairly lean),
1 pound Zanzibar-Brand Southern Style Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
8 ounces sugar,
2 pounds salt,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Put the meat through a meat grinder, using the ⅜-inch-hole plate and, at the same time, add the required ice or ice water.

Second.—When ground, place it in a sausage mixer and add all other ingredients.

Note.—If one has no power mixer, the meat should be put into a clean galvanized iron pan or a clean tub, and the seasonings and ingredients added. Mix thoroughly and then put the mixture through the ¼-inch-hole plate of the meat grinder.

Third.—Stuff into hog casings. Do not link this sausage but leave it whole, two, three or four feet long.

Fourth.—Cook the sausage 20 to 30 minutes, according to thickness, in water held at 150 to 155 degrees F. Then place in stone crocks, in layers, and coil the sausage around the inside of the crock like a rope, so that the crock may be completely filled to within about one inch of the top.

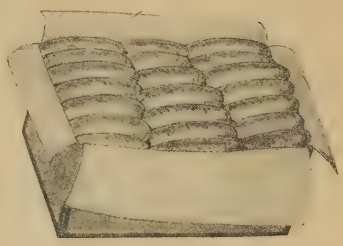
Fifth.—Pour warm lard into the crock so as to cover all of the sausage; press down the sausage until the coils are well covered with lard. Allow it to cool until the lard is congealed; then put into a cool place.

If this sausage is made properly it should keep all summer in a perfectly fresh condition. It can be taken out of the fat or lard whenever it is required, cooked in a frying pan and served like fresh fried sausage.

The above formula is intended for those who kill hogs in the winter months and want to carry the sausage through the winter and spring for summer use.

Club-House Pork Sausage

(Fancy Breakfast or Baby Link Sausage)



This is the finest quality of pork sausage that can be made.

It is usually made of the whole hog, or of the whole hog less the hams and bacon. The hams and bacon are cured and the rest of the meat is worked up in this sausage. It can also be made of fresh hams and of fresh hams and shoulders mixed; also of pork loin, but if this is used, some hard fat must be added as the pork loin is not fat enough.

First.—Trim out all the meat very carefully, removing the bones, sinews, and blood vessels, leaving nothing but the clear pork and hard fat. The meat must not be too fat.

100 pounds meat, trimmed out as above,
1 pound Zanzibar-Brand English Breakfast Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
8 ounces granulated sugar,
2 pounds salt,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding, and to give it proper consistency.

Second.—Mix all the ingredients together with the trimmed pork and run them through the ⅛ or 3/16-inch-hole plate of the meat grinder, adding the water while grinding.

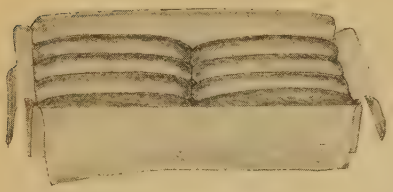
Third.—If the meat needs any mixing, mix it well by hand, and then stuff into narrow sheep casings, and twist off into links about three inches long.

Fourth.—After the sausage is stuffed, hang it up and allow it to dry for several hours, then cut the links and pack the sausage in boxes lined with parchment paper. Pack one pound to the box. Store the packed sausage in a cold refrigerator, and it will keep for a number of days in a perfectly fresh condition.

Fifth.—The best way to serve this sausage is first to place it in hot water at a temperature of about 150 degrees F., and leave it in this water for about ten minutes; then take it out of the water and place in a frying pan, in some fat, frying until it is nice and brown. If these sausages are fried without first boiling, the outside becomes too dry before the inside is cooked, but by boiling them first and cooking the pork in this way, they are nicely browned and fried without drying too much.

Club-house pork sausage of cut-up hams is the most delicious made.

Smoked Pork Sausage



80 pounds lean pork trimmings (Freeze-Em-Pickle cured),
10 pounds beef trimmings (Freeze-Em-Pickle cured),
10 pounds pork back fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand German Pork Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Place the beef trimmings in the silent cutter. Let the machine go around twice. Add the pork trimmings and let it make two more turns.

Second.—Then add the pork back fat, Bull-Meat-Brand Flour, Zanzibar-Brand Pork Sausage Seasoning, "B" Condimentine, sugar, salt, and crushed ice or ice water. Let the machine run until the meat is chopped fine, or until it is the size of small peas.

Third.—Stuff into medium hog casings and link about six to the pound, which should make each about five inches in length. When linking this sausage leave a space between the middle links so that they can be hung over the sausage sticks without flattening. Prevent them from coming in contact with each other during the smoking or cooking process.

Fourth.—Smoke in a hot smokehouse for two to three hours, until well cooked through to the center and well smoked. They are then ready for sale as soon as taken out of the smokehouse. This formula makes a smoked pork sausage of the finest kind.

In some sections this sausage is given a hot smoking for only about one hour and then cooked in hot water for about twenty minutes at 155 degrees F. When cooked, shower the sausage with hot water and then with cold water, allow it to drain, and then put the smoked sausage into a refrigerator or a cooler. Next day they are ready for sale or packing.

If one has no silent cutter but only a meat grinder, the sausage should be made as follows.

Mix the pork, fat, Bull-Meat-Brand Flour and all the ingredients together; then put them through the ¼-inch-hole plate of the meat grinder. Now mix by hand until all is evenly mixed, stuff into casings and handle as above.

Hickory-Smoked Country Sausage

100 pounds pork trimmings,
1 to 2 pounds salt, to taste,
1 pound Zanzibar-Brand Dixie Special Pork Sausage Seasoning,
½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Ice water or cracked ice to cool the meat while grinding and to give it the proper consistency.

First.—Mix all ingredients thoroughly and grind through the ⅛-inch-hole plate of the meat grinder.

Second.—Then mix well by hand, adding only a little water so the sausage can be stuffed and linked like regular pork sausage.

Third.—Stuff into small hog casings and link them.

Fourth.—Smoke about 12 hours in a cold smoke of green hickory. It is then ready for use. The customer boils, fries or otherwise prepares it.

Those who make this sausage report it as one of their leading sellers, the year around, and a great drawing card.

Chile Pork Sausage

Formula No. 1

100 pounds pork trimmings (Freeze-Em-Pickle cured),
¼ to ½ pound "B" Condimentine,
½ pound Zanzibar-Brand Chile Powder,
½ pound Zanzibar-Brand Spanish Style Sausage Seasoning,
½ pound granulated sugar,
1 ounce Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.
Sufficient cracked ice or ice water to cool the meat while grinding and to give the proper consistency.

First.—Put the pork trimmings through the 3/16-inch-hole plate of the meat grinder.

Second.—Place the meat in a power mixer or, if you have no mixer, mix it by hand in a tub, and while mixing add the "B" Condimentine, Zanzibar-Brand Chile Powder, Zanzibar-Brand Spanish Style Sausage Seasoning, Bull-Meat-Brand Flour, and all other ingredients. Also add gradually the crushed ice or ice water.

Third.—When thoroughly mixed stuff into hog casings and tie with twine in four-inch links. Give them a cold smoke for 6 to 8 hours, allow them to cool, and they will then be ready for sale.

Formula No. 2

60 pounds pork trimmings (Freeze-Em-Pickle cured),
30 pounds beef trimmings (Freeze-Em-Pickle cured),
10 pounds pork back fat (Freeze-Em-Pickle cured).

First.—Put the beef through the ⅛-inch-hole plate of the meat grinder, and the pork and fat through the 3/16-inch.

Second.—Then put the meat into a power mixer or mix by hand and add the same ingredients and seasonings as directed in Formula No. 1.

When this sausage is taken out of the smokehouse it should have a light brown color, but not too dark.

It may be eaten cold, boiled or fried. It is best when fried like other pork sausage.

Thueringer Bratwurst

(Thuringian Pork Sausage)

75 pounds fresh pork trimmings, fat,
25 pounds fresh fat beef trimmings, such as flanks, plates, etc.,
2 pounds fine salt,
1 pound Freeze-Em-Pickle,
½ pound sugar,
¼ to ½ pound "B" Condimentine,
1 pound Zanzibar-Brand German Pork Sausage Seasoning,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it proper consistency.

First.—Trim out the meat and remove all bone, sinews, gristle, and blood clots.

Second.—Put the beef through the 5/64-inch-hole plate of the meat grinder and the pork through the ¼-inch-hole plate. Add ice or ice water while grinding to keep the meat cool. Then put all into mixer and mix in all of the other ingredients.

Third.—Stuff into medium hog casings, tying off in one-pound links or rings and twist into two links.

Fourth.—Hang the sausage in a cool smoke made with hardwood sawdust, long enough to develop a pleasing smoke color. Take out of smokehouse and dip in hot water colored with Zanzibar-Carbon-Brand Casing Brown Mixture to give a bright smoke color. Then

let the Thüringer hang at work-room temperature without draught until cooled, when they will be ready for sale.

Thüringer Bratwurst, made strictly according to these directions, is a famous delicacy that will quickly establish a profitable market for itself, particularly in Germanic communities. The housewife may cook it by simmering 20 minutes in water at about 180 degrees F. or fry it in its own fat like other pork sausage.

Swiss Bratwurst

A Pork Sausage Delicacy

40 pounds veal trimmings,
30 pounds lean young pork trimmings,
10 pounds young pork fat,
2 gallons sweet milk,
1½ pounds salt,
¾ pound Zanzibar-Brand German Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
½ of one lemon rind, chopped fine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Trim the veal, pork and fat carefully, chop or grind very fine. If made with a meat grinder, use a 5/64-inch plate.

Second.—Heat the sweet milk to 145 degrees F., hold it at that temperature a half hour, and then cool it to ice-box temperature. This pasteurizes the milk and makes the sausage keep longer.

Third.—Mix the ground meat and gradually add the salt, flour, milk, "A" Condimentine, and seasoning. Water can be used instead of the milk, but milk makes a better quality sausage. If the veal is used warm, immediately after dressing, it will absorb more milk or water, but the keeping quality will not be so good.

Fourth.—Stuff loosely into thin hog casings and twist into links of 3½ to 4 ounces.

Either the butcher or the customer must cook the sausage 10 minutes in water held at 155 degrees F. If the butcher cooks it, the pasteurizing of the milk (as directed under "Second") is not necessary.

Milk does not keep well and the sausage which contains it must be kept in the ice-box or in the refrigerated show case. It should then keep in good condition for 3 to 4 days.

The customer fries the cooked sausage slowly, until brown, in hot fat with chopped onions. It is a delicious dish.

Italian Pork Sausage

70 pounds fresh pork trimmings (medium fat),
30 pounds fresh beef trimmings,
2 pounds salt,
1 pound Zanzibar-Brand Pork Sausage Seasoning,
2 ounces Zanzibar-Brand Chile Powder,
¼ to ½ pound "A" Condimentine,
1 ounce ground cinnamon,
1 ounce Zanzibar-Brand Imitation Brandy Flavor,
1 ounce Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Put the fresh pork trimmings through the ¼-inch-hole plate of the meat grinder, and the fresh beef trimmings through the finest plate, adding the cracked ice or ice water gradually while grinding.

Second.—Place the meat in a sausage mixer, or mix by hand in a tub, and add, while mixing, the Zanzibar-Brand Pork Sausage Seasoning, "A" Condimentine, Zanzibar-Brand Chile Powder, Zanzibar-Brand Garlic Compound, Bull-Meat-Brand Flour, Brandy Flavor, ground cinnamon, and salt.

Third.—When thoroughly mixed, stuff into hog casings and make links four inches long.

Fourth.—Hang the sausage on sticks to drain and allow the casings to dry on the outside before placing them in a cooler or refrigerator.

Spanish Chorizos

Best Quality

100 pounds pork trimmings, Freeze-Em-Pickle cured,
1 pound Zanzibar-Brand, Spanish-Style, Sausage Seasoning,
2 ounces Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine,
½ gallon 40-grain vinegar,
½ pound granulated sugar,
Salt to taste,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Take 100 lbs. pork trimmings that have been cured for two weeks with Freeze-Em-Pickle. Run them through a meat grinder, using the ¼-inch-hole plate. If a silent cutter is used, cut the meat to the size of a bean.

Second.—After the meat is cut to the proper size, add the seasoning and other ingredients.

Third.—Mix the meat either by hand or in a power mixer until all the seasonings and ingredients have been thoroughly and evenly distributed.

Fourth.—Spread the meat 5 or 6 inches thick, on clean boards, and place these on racks in the cooler at a temperature of about 38 to 40 degrees F.

Fifth.—The following day stuff the chorizos into hog casings, but do not stuff them so tightly that they cannot be linked.

Sixth.—Link the casings as follows. First tie the string around the end of the casing and pull it tight, then 5 inches from this point squeeze the casing together and work the meat down to the tight end as far as possible. Extend the string from the end to this point and tie another loop here. Five inches farther, squeeze the casing together and the meat down as tightly as possible; make another loop allowing the strings to extend from one loop to the other until eight sausages have been tied off. Cut off beyond the eighth link; then tie a loop in the center, between the fourth and fifth links, so that the sausages can be hung on a stick by the string and not lie over the top of the stick as is customary with pork sausages.

Note.—In linking the sausage the meat should be pushed up as tightly as possible, so as to fill the casings full and plump. The tighter the meat is packed in the casings, the better the sausage will be.

Seventh.—After the sausages are all tied, prick each with a fork to let out the air. Then hang them on sticks and separate them so that the sausages will not touch each other. Hang them in a cooler for two days at a temperature of from 38 to 40 degrees F.

Eighth.—After the sausages have hung in the cooler for two days, so that the meat is cured, remove them to an airy room so that the temperature of the sausages will rise to normal, or else hang them in the smokehouse and let them drip and dry there for several hours before the smoke is started.

Ninth.—Chorizos must be smoked to taste: in cool smoke, from two to four days, according to intensity of the smoked flavor desired, and depending somewhat on the temperature of the weather. After they are smoked they should be hung in a drying room from one to two weeks, with plenty of air and ventilation to dry and cure them before they are ready for shipping.

For home consumption and for retail trade chorizos may be used as soon as they come out of the smokehouse, but if they are to be shipped any distance, they must first be dried at least three weeks in a drying room. They may also be canned with lard.

They should not be kept in too much draught, because, like all air-dried sausage, they are liable to become hollow and dry too quickly. They must dry slowly. Always remember that to get the best results the meat must be fresh and well chilled before the sausage is made, and kept as cold as possible during the process of chopping.

When pork trimmings are high in price and mutton is cheap, 40 per cent of mutton can be used with the pork in chorizos with very good results.

Kielbassa

Silesian Country Pork Sausage

100 pounds pork trimmings (1/3 fat), Freeze-Em-Pickle cured,
1 pound German-Style Pork Sausage Seasoning,
Sufficient ice water or crushed ice to cool the meat while grinding and to give it the proper consistency,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

A little beef may be used, if desired, but not over 10 pounds in the 100. It should be Freeze-Em-Pickle cured.

First.—Run the meat through the ¼-inch-hole plate of the meat grinder, adding very little ice water or crushed ice.

Second.—Add the seasoning and Bull-Meat-Brand Flour and mix thoroughly in a power mixer or by hand in a tub.

Third.—Stuff into well cleaned, wide hog casings, tying off into links of one-half to three-fourths pound.

Fourth.—Let the stuffed sausage hang several hours till dry on the surface. Then smoke in a cool smoke until they have a nice golden yellow color. Zanzibar-Carbon-Brand Casing Brown Mixture, used sparingly, will aid in producing the desired color and will save shrinkage. When cold, the Kielbassa is ready for sale.

The housewife may roast it in the oven or heat it in water, and serve with potato soup, lentils, baked potatoes, etc. It is a delicacy even when eaten cold.

Bockwurst

Bockwurst is made usually during the spring time, especially around Easter.

The coming of the Bockwurst season is hailed as the event of its season. Especially was this the case when the famous Bock Beer was sold, and many appetizing lunches were prepared with this delicacy.

Those who make Bockwurst are looked upon as up-to-date sausage makers. Bockwurst is a very perishable product and it is customary for the sausage maker and butcher to solicit orders in advance, leaving only a small quantity on hand after previous orders are filled. We give here several formulas for making Bockwurst.

FORMULA No. 1

15 lbs. fresh veal trimmings,
25 lbs. lean pork trimmings, off the shoulder or neck, Freeze-Em-Pickle cured,
10 lbs. fresh pork back fat.

FORMULA No. 2

15 lbs. fresh veal trimmings,
35 lbs regular pork trimmings, 3 to 4 days in cure (not too fat), Freeze-Em-Pickle cured.

FORMULA No. 3

15 lbs. beef trimmings, 3 to 4 days in cure, Freeze-Em-Pickle cured,
35 lbs. fresh pork trimmings.

FORMULA No. 4

15 lbs. beef trimmings, 3 to 4 days in cure, Freeze-Em-Pickle cured,
10 lbs. fresh plain tripe,
25 lbs. pork trimmings, 3 to 4 days in cure, Freeze-Em-Pickle cured.

First.—Put all the meat through the 5/64-inch-hole plate of the meat grinder, cutting very fine. It is sometimes best to put it through a plate with 1/8-inch-hole first, and then through the 5/64-inch-hole plate, so as to be sure to get the meat nice and fine.

Second.—When ground, put the meat into a power mixer, or, if

you have no mixer, place it in a tub and mix by hand, adding the following seasonings and ingredients while mixing:

2 qts. milk (ice cold),
6 oz. granulated sugar,
1 doz. fresh eggs, both yolks and whites,
2 to 3 bunches chives, chopped very fine, the finer the better,
¼ to ½ lb. "A" Condimentine,
½ oz. chopped green parsley,
8 oz. Zanzibar-Brand Frankfurt Sausage Seasoning,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Salt to taste.

Regulate the quantity of salt to be used by the quantity of salted meat used. Usually 1¼ lbs. of salt is sufficient for 50 lbs. of Bockwurst, when it is made of fresh meat. Mix in the milk slowly. (If chopping in a silent cutter, one can mix the seasonings and ingredients while the meat is being chopped.)

Third.—Stuff immediately into small sheep casings, and link them off into links two to three inches long, to suit the trade. Then hang them in a refrigerator or cooler.

Caution.—Care should be used in chopping or grinding the meat to prevent heating in the machine; otherwise you will not get good results. Bockwurst is not smoked but sold green, and when prepared for eating it is cooked slowly for 10 minutes.

Fresh Mixed Sausage

50 lbs. waste ends of all pork, beef, veal, mutton and lamb,
½ lb. Zanzibar-Brand Yankee-Style Pork Sausage Seasoning,
1 lb. salt,
2 to 4 oz. "A" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient ice water or crushed ice to cool the meat while grinding and to give it the proper consistency.

Run the mixed meat ends through a coarse plate of the meat grinder, put them into a tub, add all the other ingredients, and mix well, adding a little water, from time to time, until the mixture is like paste.

Then run the mixture through the finest plate of the meat grinder, and stuff into medium sheep casings. Keep the mixture wet enough to make linking easy.

This mixture is also a good seller when made into patties molded between the hands and sprinkled all over with Bull-Meat-Brand Flour. The trade likes this sausage and patties and they will keep the small butcher cleaned up on his meat ends.

Rice Pork Sausage

85 pounds fresh pork trimmings (medium fat),
5 pounds rice,
10 pounds scalded hog livers (chopped fine),
1 pound Zanzibar-Brand Dixie Special Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
½ pound granulated sugar,
2 pounds salt,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

How to Prepare

First.—Cook rice until tender but not mushy. Allow to drain and cool.

Second.—Scald the hog livers and put them twice through the 5/64-inch-hole plate of the meat grinder, as they should be ground very fine.

Third.—Then put the fresh pork trimmings through the ⅛-inch-hole plate of the meat grinder, and gradually add the crushed ice or ice water.

Fourth.—Put the ground pork and liver into a sausage mixer. If you have no mixer put them into a tub and mix by hand. Add the Zanzibar-Brand Pork Sausage Seasoning, "A" Condimentine, salt, sugar, and Bull-Meat-Brand Flour. Do not mix too long, just long enough to mix all the ingredients thoroughly.

Fifth.—When the whole contents are partly mixed, pour the cooked rice over the meat and mix until the rice is well distributed, but not long enough to mash it.

Rice pork sausage can be stuffed into hog casings or sold in bulk and disposed of like pork sausage. It is a delicious breakfast luxury and an economical product. It is a good seller and one can, with careful attention to its manufacture, create a good demand for it.

Rice is easily and thoroughly digested, and for this reason is often recommended as suitable for children and invalids. With Bull-Meat-Brand Flour, the two supply necessary carbohydrates. The **meat** provides an abundance of material for bone, muscle and fuel. The **liver** not only supplements this, but supplies the vitamins for the regulation of the body functions.

Thus rice pork sausage is a well balanced health food, especially suitable for the growing members of the family and for institutional use.

Oatmeal Sausage

Formula No. 1

60 pounds brisket of beef trimmings (Freeze-Em-Pickle cured),
15 pounds oatmeal,
15 pounds pork jowl fat (Freeze-Em-Pickle cured),
10 pounds pork skins or rinds,
1 pound Zanzibar-Brand Yankee-Style Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
8 ounces sugar,
Salt to taste,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Cook the beef brisket until the meat is easily removed from the bone, about 2½ to 3 hours, in a jacketed kettle or in a kettle over the fire. Cook the hog skins or rinds in the same water, at the same time as the beef brisket, in which time they should be cooked soft.

Second.—In this same water cook the jowl fat for one hour.

Third.—Remove the meats from the cooker and allow them to cool.

Fourth.—Place the oatmeal in the water the meat was cooked in and cook it about one hour, stirring while cooking, and adding water from time to time when necessary.

Fifth.—Run the hog rinds and beef through the 5/64-inch-hole plate of the meat grinder; run the cooked pork jowls through the ¼-inch-hole plate.

Sixth.—When the meat and oatmeal have cooled, place them in a power mixer or mix by hand and, while mixing, add the other ingredients.

Seventh.—When thoroughly mixed, stuff into small beef round casings, and tie in one-pound rings.

Eighth.—Cook them in water, 20 to 30 minutes, according to the thickness of the sausage, at a temperature of 150 to 155 degrees F. When cooked, rinse them with boiling water and then immerse in ice-cooled water for a few minutes to cool. Hang them to drain and dry; they will then be ready for sale.

Oatmeal Sausage

Formula No. 2

30 pounds pork trimmings (Freeze-Em-Pickle cured),
30 pounds beef trimmings (Freeze-Em-Pickle cured),
20 pounds beef or pork cracklings,
20 pounds oatmeal,
5 pounds onions,
¼ to ½ pound "A" Condimentine,
½ pound granulated sugar,
1 pound Zanzibar-Brand Pork Sausage Seasoning (Yankee Style),
Salt to taste,
Bull-Meat-Brand Flour, in proportion allowed by your state food law.

First.—Put six gallons of water into a double boiler or into a jacketed kettle and dissolve the Condimentine, sugar and Zanzibar-Brand Pork Sausage Seasoning. Then add oatmeal; bring it to boiling point (212 degrees F.) and continue boiling 1½ hours. Stir occasionally and, as the water evaporates, add more to replace it.

Second.—Mix the Freeze-Em-Pickle cured trimmings, the cracklings and onions together, and run them through the 5/64-inch-hole plate of the meat grinder. One-half hour before the oatmeal is through cooking, add the ground meat, and stir well. Continue to cook one-half hour longer. Then reduce the fire and, while hot, stir in the Bull-Meat-Brand Flour. When the flour is thoroughly mixed, remove all from the fire and set it aside to cool.

Third.—When cool, stuff it into hog casings and tie in links of six to the pound or in small rings two to the pound. Cook the sausages in water at 155 degrees for 20 to 25 minutes. Put them into cold water to set; then hang them up to drain. When cold they will be ready for sale. They are very good to eat.

How to Prepare for Eating

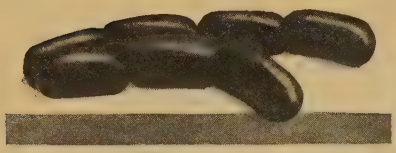
They can be eaten cold, boiled or fried. The best way is to fry them the same as pork sausage.

This is a very low cost sausage to make, especially for retail butchers who have plenty of fat in the scrap heap for which they get almost nothing. Make a small batch and try it. See how your trade will like it.

White Pudding

Barley sausage or "white pudding," without blood, uses one-third cooked barley, two-thirds fat and cracklings (either beef or pork), with onions and the usual quantity of "A" Condimentine, sugar, ice water, Bull-Meat-Brand Flour, and our Zanzibar-Brand English Breakfast Pork Sausage Seasoning. It is stuffed and linked like pork sausage.

Tomato Pork Sausage



100 pounds fresh pork trimmings (medium fat),
20 pounds fresh or canned tomatoes (with the juice),
2½ pounds salt,
1 pound Zanzibar-Brand Dixie Special Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
1 to 2 pounds granulated sugar, according to taste,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

How to Prepare

First.—Prepare the tomatoes long enough in advance to let them cool before making the sausage, as they must be cold when added to the meat. Whether the tomatoes are canned or fresh, add the sugar and boil them for 10 to 15 minutes in their own juice, and while boiling, add one-half ounce of baking soda to neutralize the acid in the tomatoes.

Second.—When cooked, skim off the scum and put all the boiled material through a sieve, or a cheesecloth sack, to strain out all skins and seeds, leaving nothing but the pulp.

Third.—Then put this into an enamel or wooden bucket or pan and allow the tomato pulp to stand in a cooler or refrigerator until cold.

Fourth.—Put the fresh pork trimmings through the 5/64-inch-hole plate of the meat grinder.

Fifth.—Place the ground meat in a power mixer, if you have one; if not, mix by hand and add, while mixing, the Zanzibar-Brand Dixie Special Pork Sausage Seasoning, "A" Condimentine, salt, and Bull-Meat-Brand Flour; then, while mixing, gradually add the tomato pulp.

Do not add water to this mixture, as the tomato pulp contains sufficient moisture. This sausage should be of a firm texture and not moist.

Sixth.—Stuff immediately into medium wide hog casings, weigh off in one-pound quantities and link six to the pound. Hang them up so as not to touch each other, and allow them to drain thoroughly before placing them in the refrigerator.

Owing to the poor keeping quality caused by the use of tomatoes, only a small quantity of the sausage should be exposed or displayed for sale at a time. They keep much better in cold weather and will prove to be a good winter seller.

Belgian Cabbage-Pork Sausage

(Soucisse de Choux)

The following is a new sausage in the United States. It is very palatable and well liked. We would advise every sausage maker to try it. It is a very profitable sausage to make and when a trade is established it pays well to make it.

65 pounds fresh trimmings (either all pork or half pork and half beef),
10 pounds pork back fat,
35 pounds cabbage (with core removed),
1 quart peeled onions,
1 pound Zanzibar-Brand German-Style Pork Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
½ pound granulated sugar,
1 or 2 pounds salt to taste,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Cut out the cores of the cabbage because the core is bitter. Use a cabbage corer if you have one. Then cut the cabbage in halves or quarters. If you have not a coring knife, cut the cabbage in quarters and with an ordinary butcher knife cut out the cores.

Second.—Take 35 pounds of the cut cabbage, put it into a kettle and boil until tender; then remove it from the water, let drain and cool.

Third.—When the cabbage is cold put it in a clean sack or cloth; twist the top so as to squeeze out any surplus water. Cabbage should be ice cold when it is squeezed, and if one is in a hurry, it may be placed in ice water to cool after boiling.

Fourth.—Now mix together, as well as possible by hand, the trimmings, the pork back fat (which should be cut into pieces not larger than a walnut), the onions (cut into quarters), the pieces of boiled cabbage, seasoning, Condimentine, sugar and salt, or put the ingredients into a mixer if you have one; then put the whole mixture through the 3/16 or ¼-inch-hole plate of the meat grinder.

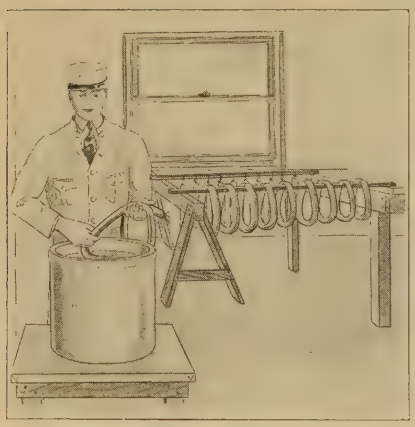
Fifth.—Stuff into hog casings and twist off in links like those of regular pork sausage. It is then ready for sale.

If much beef is used in this sausage, let the beef be ground separately, at first through the 5/64-inch-hole plate of the grinder and then mix with the pork. When this is done it makes a tender and pleasing sausage.

To prepare this sausage for eating, fry or cook it like pork sausage. To one that is fond of cabbage, this sausage will prove a treat.

Swedish Potato Sausage

(Potatis Korv)



BRINING POTATO SAUSAGE TILL SOLD

40 pounds pork trimmings, lean, (Freeze-Em-Pickle cured),
35 pounds beef brisket trimmings, beef flanks or any suitable beef trimmings (Freeze-Em-Pickle cured),
25 pounds boiled potatoes, cold, smashed fine or run through the fine plate of a grinder,
1 pound Zanzibar Frankfurt Sausage Seasoning,
1 pound raw onions, chopped fine,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
Salt to taste,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First—Take the beef and pork trimmings that are cured with Freeze-Em-Pickle, as per our directions for curing meat for bologna and frankfurts, and run the pork through the ¼-inch plate of a meat grinder, and the beef through the ⅛-inch plate. Add crushed ice or ice water while grinding.

Second.—Boil the potatoes, peel them, run them through the fine plate of the meat grinder, and allow them to cool.

Third.—Mix well the meat, potatoes, Bull-Meat-Brand Flour, onions and all the ingredients.

Fourth.—Stuff into beef rounds or hog middles, the entire length, medium loose, and place in 40-degree brine, to which Freeze-Em-Pickle has been added at the rate of one pound Freeze-Em-Pickle to 25 gallons brine. Keep this sausage in this brine until sold. It will keep nicely for several weeks. This sausage is not cooked but is sold raw by butchers, and cooked by the housewife, boiling slowly for about fifteen to thirty minutes, depending upon the taste and on the size of casing.

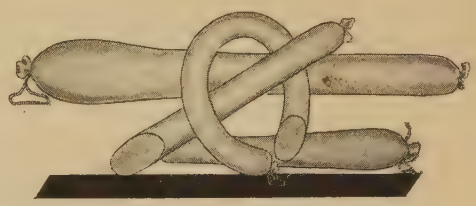
Some sausage makers prefer to cut the pork as finely as the beef, running it through the ⅛-inch-hole plate, the same as the beef.

Raw potatoes can also be used instead of boiled. After peeling, run them through the ⅛-inch-hole plate of the grinder, and make the sausage in the same manner as when using boiled potatoes. It is better, however, to use boiled potatoes, for the housewife may not cook the sausage as thoroughly as raw potatoes require. Furthermore, the raw potatoes turn dark and gray, discoloring the sausage.

The sausage can also be made of fresh beef and pork. The Freeze-Em-Pickle and salt are then added when the sausage is made. But it will not have as good a color, nor will it keep as well as when made of meat that is cured with Freeze-Em-Pickle for a few days before it is ground into sausage.

Liver Sausage

60 pounds hog livers,
10 pounds pork rinds or skins, cooked,
30 pounds fat jowl pork, either fresh or cured. Pork head trimmings or belly trimings and part tripe can be used.
1 pound Zanzibar-Brand Braunschweiger Liver Sausage Seasoning,
2 pounds onions, chopped fine,
¼ to ½ pound "A" Condimentine,
2½ pounds salt,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.



How to Prepare

First.—Slice the livers about one inch thick; place them in a clean barrel, and pour boiling water over them until there is about one-third livers to two-thirds boiling water. Stir with a wooden paddle or sausage stick until the boiling water is around each individual slice of liver. Leave them in this condition for five to ten minutes until they are scalded through to the center; then drain off the hot water and let cold water run in, allowing the livers to remain in the cold water until they are cooled through to the center.

Second.—Cook the jowl fat and tripe about ten to fifteen minutes. Then put them into ice water until cooled through to the center.

Third.—The hog rinds must be boiled in as little water as possible until tender, the length of time depending upon the age of the hog. Then drain them, saving the water they were cooked in.

Fourth.—Put the fat, liver, pork rinds, tripe, trimmings, and onions through the 5/64-inch-hole plate of the meat grinder twice, as they must be cut very fine. The finer they are cut the better the sausage will be.

Fifth.—Put all the meats into a sausage mixer. If one has no sausage mixer, the meats are put into a tub and mixed by hand. Add seasonings, Bull-Meat-Brand Flour, and all other ingredients, and while mixing add some of the water the hog rinds or skins were cooked in. After mixing for a few minutes, notice if the right texture is obtained, which should be of a pasty nature. Judgment should be used as to whether more Bull-Meat-Brand Flour and water is needed.

Sixth.—There are different kinds of casings used for liver sausage: it is a matter of choice. The principal casings are hog bungs, beef rounds, beef middles, and sheep bungs. Ordinarily, hog bungs are preferred. For ring liver sausage, beef middles, 16 to 18 inches long, are commonly used. Stuff the casings so as to be plump, but allowing for expansion in cooking. Tie the ends carefully, as one may tie them too tightly and cut through the casings; on the other hand, if tied too loosely the contents will run out while cooking.

Seventh.—Cook the sausage in hot water, between 150 and 155 degrees F., from thirty to forty minutes, according to the thickness of the sausage. Large ones require even more time to cook through to the center.

Eighth.—When cooked remove them from the cooking water and put them into cold water which has been previously chilled with ice. If the water in the supply pipe is cold, allow it to run on the sausages until they are cooled through to the center and firm enough to handle. Then hang them in a cooler or refrigerator. The next day they will be ready for sale.

There is also good liver sausage material to be had from calf heads; brains can likewise be used to good advantage in liver sausage. Always be sure that there is fat enough in the mixture to insure a tender and palatable sausage; also that there is self-binding material such as pig snouts, hog rinds, pig heads, etc. The material for liver sausage should contain about 30 per cent. of jelly-producing material.

As high as 75 per cent. liver can be used, but the color darkens accordingly. Tripe and fat help to make a lighter color. A large proportion of cured lean meat produces a reddish interior.

Curing Meat for Liver Sausage

Good liver sausage should always contain a certain amount of meat and fat in addition to the liver. Before making the sausage, this fat and meat should be cured for a week or two in a brine made as follows:

1 pound Freeze-Em-Pickle,
7 pounds salt,
5 gallons of water.

Liver sausage made with meat which has been cured in this manner will keep much better after it is made. Where it is necessary to ship liver sausage any great distance, or to keep it on hand any length of time after it has been made, the livers can also be cured in the above brine for two weeks before making the sausage. The best way to cure the livers for this purpose is to cut them into strips after they have been chilled for 24 hours and then put them into the brine to cure. Packers who must ship liver sausage during the summer months will find the above directions in making liver sausage very valuable. When cured meat is used less salt must be used in seasoning the sausage.

How to Prepare and Cook Meat for Liver Sausage

All the meats, after being cooked for liver sausage should be allowed to get cold before chopping. When cold, chop them very fine in a silent cutter or put them through the 5/64-inch-hole plate of a meat grinding machine. While chopping or mixing, add some of the cold soup or water in which the meat was cooked; also some of the fat. Mix the Zanzibar-Brand Liver Sausage Seasoning, Bull-Meat-Brand Flour and other ingredients as directed in the preceding formula.

It will be found that the use of cured meats in liver sausage avoids much of the shrinkage, and that such liver sausage, when sliced, has a much finer and more appetizing appearance.

Smoke-Colored Liver Sausage

Color the casings by dissolving our Zanzibar-Carbon-Brand Yellow Casing Mixture in the cooking water, or by dipping the casings when they are soaked, before cutting and tying them. This will give liver sausage a beautiful yellow smoke shade color and, when done before the strings are tied on them, the strings will not be colored.

Home-Style Liver Sausage

(Hausmacher Leberwurst)

(Hemgjord Lever Korv)

60 pounds raw hog livers,
40 pounds fat pork jowls or neck fat.

How to Prepare

First.—After cutting out the large veins, put the livers through the 5/64-inch-hole plate of the meat grinder twice, chopping them as finely as possible.

Second.—Cook the jowls or neck fat thirty minutes to one hour, in water held at 180 degrees F., and then, after cooling, put them through the 5/64-inch-hole plate of the meat grinder.

Third.—Place all the meat in a sausage mixer and add the following ingredients:

2 to 2½ pounds salt,
1 pound Zanzibar-Brand Braunschweiger Liver Sausage Seasoning,
2 pounds onions (chopped fine),
¼ to ½ pound "A" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

Fourth.—When thoroughly mixed, stuff into hog bung casings and cook the sausages slowly in hot water, about forty to fifty minutes, according to the size of the casings, at a temperature of 155 degrees F. If the casings are very wide it will take an hour or a little longer.

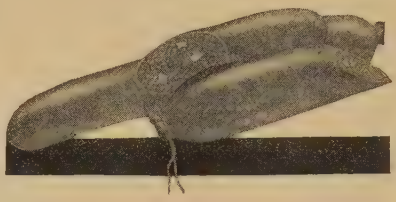
Fifth.—When cooked, place the sausage in a cooler in brine which tests 40 degrees by salimeter, with one pound of Freeze-Em-Pickle added to each 25 gallons of brine, leaving it for 24 hours. This will help to preserve the casings and remove the slime. It also makes a much better keeping product than if simply chilled in cold water.

Sixth.—When chilled hang on sausage sticks in a cooler or refrigerator and they are then ready for sale.

This is a favorite formula in Swedish and German circles.

Brunswick Liver Sausage

(Braunschweiger Leberwurst)



40 pounds fat pork trimmings from bellies, etc., and hog heads (fresh),
50 pounds hog liver (fresh),
5 pounds ham fat trimmings,
5 pounds hog or calf ruffle. (If calf fat can be obtained it is better than the hog fat.)

First.—Run all the meat and liver through the 5/64-inch-hole plate of the meat grinder. Grind as fine as possible; then add all the seasonings and Bull-Meat-Brand Flour and mix together thoroughly.

2 pounds onions,
1 pound Zanzibar-Brand Braunschweiger Liver Sausage Seasoning,
2 pounds salt,
1 pound "A" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

If one prefers, he can mix the cut-up hog liver, meat and all ingredients together first, and then run them through the grinder twice. This is an easier way of mixing them thoroughly. This sausage must be cut very fine and must be well mixed. The finer it is cut, the better the sausage will be. If one has a silent cutter, it should be used for making liver sausage, as this cuts the meat the finest and produces the best sausages. Add ice or ice water while cutting. This mix must have enough water to make it very soft.

Second.—Stuff into hog bungs of good size. Previous to stuffing Braunschweiger, take hold of the thick end of the hog bungs and draw them several times through the other hand to remove all the moisture which may have entered while washing and soaking the bungs.

Third.—When stuffed, tie the ends securely and cook the sausage in hot water, at a temperature of 150 to 155 degrees, for thirty to sixty minutes, according to the thickness of the sausage. Large sausage must cook an hour or longer to be cooked through. When cooked, place the sausage in cold brine in a cooler. The brine should test 40 degrees by salimeter, with one pound of Freeze-Em-Pickle added to each 25 gallons of brine. Leave the sausage in this brine 24 hours. This will help to preserve the casing and prevent slime molds. It makes a much better keeping product than if simply chilled in cold water. When chilled, hang on sticks to drain in the cooler or refrigerator and they will be ready to smoke.

Fourth.—When drained, hang them in a smokehouse and give them a cold smoke. When smoked, cool them at room temperature and then hang them in a refrigerator or cooler. When cold and firm, they are ready for sale.

This formula produces a very fine quality of Brunswick liver sausage.

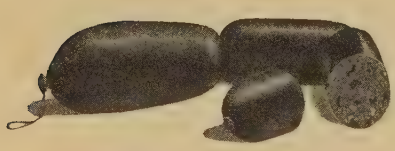
Note.—This sausage is made of all fresh meat. None is cooked until the sausage is finished.

Large quantities of this grade of liver sausage are consumed in this country.

Danish Liver Sausage
(Leverpölse)

This sausage is made in the same manner as our best quality Brunswick liver sausage. The Danes make it in exactly the same manner as it is made in the United States, and sell very large quantities of it.

Goose Liver Sausage



Goose liver sausage is made similar to Brunswick liver sausage with the exception that cubes of goose liver are added. When making Brunswick liver sausage it is economical and therefore advisable to take a small portion of the finished mixture and make goose liver sausage. Many people are very fond of this and good trade can be established on this product at a very satisfactory profit.

Goose liver sausage is made as follows.

First.—Cook the goose livers in boiling water until cooked through. Then put them into cold water, allowing them to remain there until thoroughly chilled.

Second.—Cut them, by hand, into cubes of ¼ to ⅜-inch.

Third.—To every 10 pounds of prepared Brunswick sausage mixture that is ready to stuff, mix in about ½ pound of the goose livers, using care in mixing, not to squash the goose liver cubes.

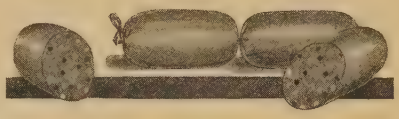
Many sausage makers add hog or beef livers to the goose livers when cutting the cubes. In most cases, the proportion of goose livers is very small: other livers take their place. A small proportion

of melted goose fat is also mixed in to give it the goose flavor.

Fourth.—Stuff into extra large size hog bungs about 14 or 15 inches long; then every 4 to 5 inches tie off the casings, but do not cut the sections apart.

Fifth.—After they are stuffed and tied off, cook and chill in the same manner as Brunswick liver sausage. Then give them a cold smoke.

Truffle-and-Goose-Liver Sausage



This sausage is made similar to goose liver sausage, with the exception that when the Brunswick liver sausage is all prepared ready to stuff (as explained in the above third operation) mix into it, to every 100 pounds of meat, the following:

From 50 to 75 truffles, cut by hand into pieces the size of a small pea, and a quantity of goose livers that have been cooked and cut into cubes, the same as for goose liver sausage.

Stuff this sausage and handle it in the same manner as goose liver sausage. Give it a cold smoke.

Liver Sausage With Goose Livers, Truffles and Pistachio Nuts

This sausage is made by using the Brunswick liver sausage mixture and adding to each 100 pounds of prepared meat ready to stuff, fifty truffles cut by hand into cubes about the size of a small pea, and a quantity of goose livers, cut into cubes of about ⅜ inch, and three pounds blanched pistachio nuts. Mix all together carefully and stuff and handle in the same manner as goose liver sausage.

Liver Sausage With Truffles

(Also Known as French Liver Sausage)

This sausage is similar to Brunswick liver sausage, with a large proportion of liver. To every 100 pounds of sausage meat ready to stuff, add about three pounds of truffles, cut into small pieces the size of a pea. They must be cut by hand. Mix in carefully, to produce an even distribution; then stuff, cook and smoke this sausage in the same manner as goose liver sausage.

Sardellen Liver Sausage

(With Anchovies or Sardines)

Sardellen liver sausage is made exactly the same as Brunswick liver sausage, with the exception that 3 to 5 per cent. of anchovies or sardines are added to the sausage.

To prepare the anchovies or sardines, cut off the heads and tails, clean out the insides of the fish, and soak in fresh water for an hour to remove some of the salt. Then grind the fish as fine as possible, mix them with the livers, and grind again at the same time the livers are ground. Anchovies or sardines should be cut so fine that there is nothing left of them except the taste. To make a very fine sardellen sausage, some use as much as ten per cent. anchovies. They are always very salty: therefore use no salt in the sausage; otherwise the liver sausage, when finished, will be too salty.

Liver Sausage With Raisins

Make this sausage in the same manner as goose liver sausage, except use raisins in the Brunswick liver sausage mixture instead of goose livers.

To every 100 pounds of liver sausage take 5 pounds of raisins. Wash the raisins very clean in two or three changes of boiling water; then put them into cold water to cool. When cool, mix them into the liver sausage mixture.

If the raisins are not seedless the seeds must be removed from them. Instead of raisins, dried currants can be used, handling them in the same manner as the raisins. If the raisins used are large they can be cut in two or three pieces, or run through the ¼-inch-hole plate of a meat grinder.

Stuff, cook and smoke in the same manner as goose liver sausage.

Liver-and-Onion Sausage

60 pounds pork liver,
30 pounds pork back fat, belly fat, or jowl fat,
15 pounds raw onions,
2 pounds fine salt,
¼ to ½ pound "A" Condimentine,
1 pound Zanzibar-Brand Liver Sausage Seasoning,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Cut the livers into strips, between one and two inches thick, and put them into boiling water (212 degrees F.) until cooked through. Then put them into ice water. When chilled through, grind them as finely as possible.

Second.—Chop the onions and add them to the livers in the grinder, to be ground with them.

Third.—Run the meat and fat through the finest plate of the meat grinder. Add this and all the other ingredients to the liver and onions in the mixer. If one has no power mixer, the ingredients should be mixed by hand in a tub.

Fourth.—Stuff into hog bungs or beef middles, cook and treat entirely like ordinary liver sausage.

Finely ground cracklings from which lard has been rendered, in proportion to suit, may be added in the mixer. They add a pleasing flavor.

Grind liver sausage as fine as it can be ground.

Headcheese

(Schwartenmagen)
(Pressylta)

The proper meat to use for making headcheese is that which has been cured by the Freeze-Em-Pickle process as described on page 245. It will be much better and keep for a longer time if made with meat cured by the Freeze-Em-Pickle process.

Headcheese is made with such meats as pig heads, ox lips, tongue and neck trimmings, hog snouts, hog skins, plain tripe, pork or sheep hearts. Some headcheese is made of whole cured pig heads cooked; other is made of pig head meat removed from the heads in an uncooked condition, and afterwards cured.

Procure clean pig heads, with eyes and ear drums removed, ox lips and hog skins and keep them in brine as described on page 245 until they are fully cured. This will take at least 10 days.

The proper proportions for making good headcheese are as follows, but the quantity of the different kinds of meat can be varied according to the stock on hand:

60 pounds pig head meat, Freeze-Em-Pickle cured,
15 pounds ox lips, Freeze-Em-Pickle cured,
15 pounds hog skins, Freeze-Em-Pickle cured,
10 pounds fresh plain tripe,
1 pound Zanzibar-Brand Headcheese Seasoning,
¼ to ½ pound "B" Condimentine,
8 ounces sugar,
2 pounds onions, chopped very fine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Cook the pig heads, ox lips and hog skins in a steam jacketed kettle, or in a kettle over a fire, at a temperature of 160 degrees F., in just enough water to cover them. Let the heads cook about 2½ hours so that the meat can be slipped off the bones; the hog skins, about 2½ to 3 hours till they are tender; the ox lips, 3 to 4 hours, till they are tender; hog snouts, 1 hour; pork cheek meat, ¾-hour; tripe, 15 to 20 minutes; hog and lamb tongues, ½ to 1 hour.

It is best, if one has the time, to cook all the meat in the same kettle and in the same water, using as little water as will cover the meat at all times. If nets are used to separate the different meats, they can all be cooked together, at the same time. All of the meat used for headcheese contains large quantities of gelatin which will be drawn out of the meat into the water. Save that water as, when cold, it will be quite a heavy jelly. Skim off the grease and froth every half hour, while cooking, and strain the jelly water through two thicknesses of cheesecloth before adding it to the meats later.

Second.—Run the hog skins and tripe through the ⅛-inch-hole plate of the meat grinder. Cut the pig head meat and the ox lips into 1-inch cubes or as near this size as possible.

Third.—Place all the above ingredients in a large mixing pan, a clean tub or a power mixer and mix them thoroughly. While mixing, add enough jelly soup that the meats were cooked in to make the mixture like heavy stew.

The more of this water put into headcheese the better it will be; therefore add all of it that the meat will absorb. Bull-Meat-Brand Flour should always be used in addition to the jelly water to combine with the fats and juices, as it makes the headcheese firmer and tends to keep it from drying out and thereby losing its flavor. Always use the genuine Bull-Meat-Brand Flour. It makes headcheese very different from that made with some other binders on the market. No other binder that we have tested in our laboratory will prove as satisfactory as Bull-Meat-Brand Flour. If the butcher uses the most suitable ingredients and uses the proper methods, he is bound to make

the best products; but the most careful sausage maker cannot make fine products unless he uses good materials.

Fourth.—Then stuff by hand into clean, salted hog stomach or beef bung. If stomachs are used, tie the two small openings before stuffing. When stuffed insert a skewer at the opening, close up, and tie with a stout cord underneath the skewer forming a loop by which to hang up the headcheese.

Fifth.—Cook them in hot water, at 155 degrees, from 2½ to 3 hours, according to size. When cooked, remove them from the cooking kettle or vat and chill them over night in cold brine, testing 40 degrees on the salimeter, with one pound of Freeze-Em-Pickle added to each 25 gallons of brine. This will help to preserve the casing and prevent slime or mold. It also makes a much better keeping product than if simply chilled in cold water. When chilled through, drain the headcheeses and then place them on a clean wooden table covered with parchment paper. Cover with another sheet of parchment paper, then place clean boards on top of the paper and headcheese, weighted and pressed down firmly but not too hard. The next day wipe them with a piece of clean cheesecloth and rinse in hot water: if they are to be smoked hang them in a smoke-house and smoke them very mildly for about two hours to dry the surface.

Sixth.—Remove the headcheese from the smoke-house and place in a cooler for 24 hours at a temperature of about 40 degrees. When thoroughly cold it can be cut, sliced, or shipped whole.

Cooked pig or lamb tongues, cut into pieces three-fourths to one inch square, added to headcheese, greatly improve its quality but also increase its cost. Always remember that in cooking meat the lower the temperature in which the meat is cooked, the longer it takes to cook but the better the cooked meat is for headcheese.

How to Cure Meat for Headcheese

The proper way to make headcheese is to make it of cured meat only. Before being used, all the heads and meat for it should be cured 7 to 10 days or longer in a brine made as follows:

1 pound Freeze-Em-Pickle,
7 pounds salt,
5 gallons water.

Headcheese made of meat cured by this process will have a fine red color and will, under proper conditions, keep well in warm weather.

Blood Sausage

Blood sausage is always made of cured meat. Such meat should be cured for 7 to 11 days or longer in a brine made as follows:

1 pound Freeze-Em-Pickle,
7 pounds salt,
6 gallons water.

Use Bull-Meat-Brand Flour in making blood sausage, as it tends to absorb fat and meat juices, preventing the sausage from drying out so readily and becoming unpalatable.

Formula No. 1

20 pounds pork jowl, Freeze-Em-Pickle cured,
25 pounds hog or beef cheek meat, Freeze-Em-Pickle cured,
20 pounds ox lips or hog snouts, Freeze-Em-Pickle cured,
25 pounds ox blood (3 gallons) or 25 pounds fresh pig blood,
10 pounds hog skins, Freeze-Em-Pickle cured,
1 pound Zanzibar-Brand Blood-Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
5 pounds finely chopped onions,
½ pound granulated sugar,
1 ounce Zanzibar Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

How to Prepare the Blood

The blood can be collected the day before it is used. While collecting it, stir well, adding two ounces of Freeze-Em-Pickle to each gallon of blood.

Allow it to cool thoroughly, then strain and put it into a refrigerator or cooler over night. The next day strain it through a cheesecloth (double thickness) and set it aside in a warm place until ready to use. The blood must be used the same day that it is strained.

How to Prepare the Meats

First.—The meat should be cooked while separated in nets, at a temperature of 160 to 170 degrees F. Ox lips, about four hours; hog skins, about three hours; pork jowl fat, about one hour; hog snouts, about one hour; pork cheek meat, about one hour; and beef cheek meat, about one and one-half hours.

If the sausage is to be made of pig heads, cook the heads, at a temperature not hotter than 170 degrees F., for about 2¾ hours, until the meat slips off the bone.

Second.—Cook the pork jowl fat one hour, remove it from the kettle and cut it by hand into ¼-inch cubes. If you have a fat cutting machine, put the fat through the machine as it cuts in more perfect cubes.

Some sausage makers place the chopped pork jowl fat in a ⅛-inch mesh sieve, and then throw boiling water over it to remove the soft or melted fat. With the use of Bull-Meat-Brand Flour, this extravagant waste is unnecessary. The Bull-Meat-Brand Flour absorbs all the melted fat and makes a better blood sausage which is moist, yet firm.

Third.—Cut the cooked ox lips and cheek meat by hand, as you would cut it for headcheese, into cubes of about ¾ inch.

Fourth.—Run the hog skins and onions through the ⅛-inch-hole plate of the meat grinder.

Fifth.—When all the meat is chopped, place it in a pan or tub large enough to mix it properly without splashing the contents over the sides. Mix all the seasonings, "B" Condimentine, blood, and Bull-Meat-Brand Flour well together.

When the flour and seasonings are well mixed with the meat, one will notice very plainly how the Bull-Meat-Brand Flour has absorbed and holds together the fatty substances, thus preventing waste and shrinkage.

Sixth.—Stuff immediately into beef bungs or beef rounds. Beef bungs are mostly used. Cut the beef bungs in lengths of about 12 to 15 inches, stuff by hand, and tie securely at one end with a loop for hanging them. If beef rounds are used, fill with the regular stuffing machine into rings of about one pound and tie securely.

Use a tin funnel, about 2 inches in diameter at the bottom and 4 inches deep for filling beef bungs. The top of the funnel should flare to about 4 inches wide and be of oval shape so that the casings may be held on the funnel between the second and third fingers of the right hand while filling.

Seventh.—After the casings are filled, place them in a truck or a tub and pour plenty of cold water over them to rinse off the blood and mixture which is likely to adhere to the outside of the casings.

Eighth.—Place the sausage in hot water 150 to 155 degrees F. This is the proper temperature for this sausage to be cooked in. If in beef bungs, cook 2½ to 3 hours; if in beef rounds, cook only for 35 to 40 minutes. When the sausages begin to float, stir and turn them in the water till cooked, to keep the ingredients evenly mixed.

One can tell when the sausages are cooked by puncturing the casing with a needle or thin wooden skewer: if no blood comes out they are cooked sufficiently. If the sausage is sufficiently cooked, when the skewer is withdrawn a small quantity of lard or fat should ooze out.

Ninth.—When the sausages are cooked, rinse them in cold water

and place them on boards or tables till cooled to ordinary room temperature: then remove them to a cooler. The next day wipe them clean with cheesecloth and hang them on sausage sticks. Then place them in the smokehouse and give them 3 to 6 hours cold smoke. This smoking process will dry the casings, give them a nice flavor and make the casings black. It also keeps them much longer and they can be shipped better, especially for long distances.

Prager Vesper

Prager Vesper is smoked blood sausage made like regular blood sausage.

Black Pudding

"Black Pudding" is the English name for regular smoked blood sausage.

Blood-Tongue Sausage

Blood-tongue sausage is made in the same manner, with the exception that cured hog tongues are added to it. The more tongue used, the better will be the sausage. Always use tongues that have been thoroughly cured by the Freeze-Em-Pickle process, as they will have a nice red appearance in the sausage. Boil the tongues until they are done and then cut them into strips; small tongues split in halves, and large tongues split in quarters. Place the tongues in the beef bungs while stuffing. For beef round casings cut the cooked pig tongues into ½-inch cubes and add these when mixing the meat.

Barley and Lard Cracklings in Blood Sausage

Barley and lard cracklings or beef cracklings make a pleasing combination in blood sausage. About twenty pounds of each may be used in the 100-pound batch. This leaves 60 pounds for the trimmings or other meats. About two gallons of blood, either ox blood or pig blood, should then be used. Cook the barley 1½ hours and grind the cracklings very fine. The Bull-Meat-Brand Flour should be used just the same, combining it with the blood before adding them to the rest. Two pounds finely chopped onions improve the barley-blood combination.

Cervelat or Summer Sausage

Made of fresh meat during the winter months in a cold climate, with proper drying room for drying the sausage.

70 lbs. pork trimmings,
20 lbs. lean beef,
10 lbs. pork back fat,
1½ lbs. salt,
1 lb. Freeze-Em-Pickle,
¼ to ½ lb. "B" Condimentine,
8 oz. granulated sugar,
1 lb. Zanzibar-Brand Summer or Cervelat Sausage Seasoning,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Before being made into sausage, the back fat must first be dry-salted for two weeks in order to get it properly cured and firm. This is done with a mixture of 1 pound Freeze-Em-Pickle and 5 pounds salt to each 100 pounds back fat. Rub this mixture over the entire surface of each piece and keep the fat in a meat-curing cooler for two weeks, in any convenient temperature above 36 degrees F. Best results are obtained when curing between 38 and 40 degrees F.

Second.—After the pork back fat has been dry-cured, shake off the salt and cut the fat into pieces about ¼ to ½-inch square.

Third.—The beef should be first finely chopped; then the pork trimmings should be added and then the pork back fat. The meat should be chopped until it is of the proper degree of fineness and while it is being chopped, add all the other ingredients.

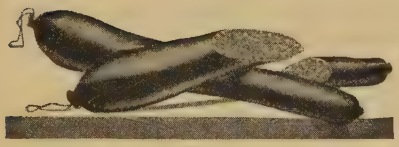
Fourth.—When the meat is chopped, it should be packed tightly in pans or boxes which should be placed in a cooler having a temperature of about 38 to 40 degrees. These pans or boxes usually hold about 50 pounds and should be shallow, not over six to eight inches deep, so that the meat may be thoroughly chilled through. Allow the meat in these pans or boxes to remain in the cooler from four to six days. It is then ready to stuff into casings.

Fifth.—Stuff the meat into fully cured and scraped hog bung casings or beef middle casings. Hang the sausage in a dry room at a temperature between 48 and 56 degrees for two or three weeks.

Sixth.—They can then be smoked, whereupon they will be ready for the market.

Cervelat or Summer Sausage

(Made of Freeze-Em-Pickle Cured Meat)



All kind of summer sausage can be made during the warm summer months or all the year round, even without a specially equipped summer sausage dry room if the meat is first cured by the Freeze-Em-Pickle process.

Formula No. 1

50 lbs. beef trimmings, Freeze-Em-Pickle cured,
20 lbs. pork hearts, Freeze-Em-Pickle cured,
30 lbs. pork trimmings (medium fat), Freeze-Em-Pickle cured.

Formula No. 2

40 lbs. beef trimmings, Freeze-Em-Pickle cured,
20 lbs. pork cheek meat, Freeze-Em-Pickle cured,
10 lbs. pork hearts, Freeze-Em-Pickle cured,
10 lbs. fat pork jowls, Freeze-Em-Pickle cured,
20 lbs. fat pork trimmings, Freeze-Em-Pickle cured.

Formula No. 3

40 lbs. beef trimmings, Freeze-Em-Pickle cured,
15 lbs. beef hearts, Freeze-Em-Pickle cured,
20 lbs. pork cheek meat, Freeze-Em-Pickle cured,
10 lbs. pork fat, Freeze-Em-Pickle cured,
15 lbs. fresh pork trimmings, Freeze-Em-Pickle cured.

Seasoning for 100 lbs. of above sausage:

¼ to ½ lb. "B" Condimentine,
½ lb. granulated sugar,
1 lb. Zanzibar-Brand Summer or Cervelat Sausage Seasoning,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

How to Prepare

First.—Cut the fat into small pieces and mix all the meat, fat, Condimentine, seasoning, sugar, and Bull-Meat-Brand Flour. Then run the mixture through the 3/16-inch-hole plate of the meat grinder.

Second.—Then place the ground meat in a power mixer, or mix by hand in a tub. Mix thoroughly and knead well.

Third.—Then spread it 5 or 6 inches thick, on boards, covering the top with parchment paper. Put it into the cooler for one or two days to cure in a temperature of about 38 to 40 degrees F.

Fourth.—After standing and curing in the cooler, remove it and mix again so as to soften and bind the meat.

Fifth.—When thoroughly mixed, stuff it into medium or small size beef middles. Hang the sausage in a room to dry at a temperature of from 48 to 56 degrees or as near this as possible and allow it to remain from two to four days. A dry cooler, at 40 to 45 degrees F., is satisfactory where there is nothing better.

Sixth.—Then give the sausage a slow cold smoke for two or three days, long enough to take on a good color.

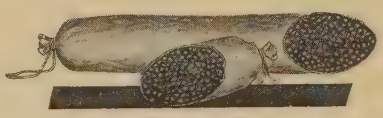
Seventh.—Now place in hot water, from 40 to 45 minutes, at a temperature of 155 degrees. The extra large sausages should remain in the hot water a longer period, depending upon their thickness.

Eighth.—Remove them from the hot water, rinse them with boiling water and then with cold water. Then hang them in a room to dry; when thoroughly dry they are ready to be shipped. They should be kept in a cooler until shipped or sold, to prevent further shrinkage.

This summer sausage has a very good flavor. It also keeps well, and has only a slight shrink. It is a good money maker for one in the sausage business and can be made by the smallest butcher or sausage maker. It takes no specially built dry rooms and can be made anywhere and under any ordinary conditions.

Farm Sausage

(Air Dried)



100 pounds pork trimming, Freeze-Em-Pickle cured,
16 ounces Zanzibar-Brand Summer Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Put the pork trimmings through the 3/16-inch-hole plate of the meat grinder.

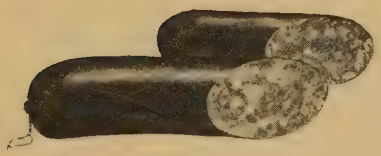
Second.—After grinding place the trimmings in a mixer or mix by hand, mixing in all the ingredients.

Third.—Then place in stuffer and stuff into selected hog casings, of large size 24 inches long and tie the ends. Break at the middle, force the meat apart and tie each separately so that they can be cut apart in 12 inch lengths, but do not cut. Then hang each pair over a sausage stick.

Fourth.—Hang them in a dry room to dry and keep at a temperature of 48 to 56 degrees, if possible.

These sausages are smoked after they are dry, which will take 2 or 3 weeks: they are simply air-dried, smoked and eaten raw.

Farmer Sausage



Formula No. 1

50 pounds pork trimmings, quite fat, Freeze-Em-Pickle cured,
50 pounds beef trimmings, Freeze-Em-Pickle cured.

Formula No. 2

40 pounds beef trimmings, Freeze-Em-Pickle cured,
20 pounds beef hearts, Freeze-Em-Pickle cured,
20 pounds pork cheek meat, Freeze-Em-Pickle cured,
20 pounds fat pork trimmings, Freeze-Em-Pickle cured.

Formula No. 3

25 pounds beef trimmings, Freeze-Em-Pickle cured,
25 pounds mutton trimmings, Freeze-Em-Pickle cured,
25 pounds pork cheek meat, Freeze-Em-Pickle cured,
10 pounds trimmings, from pickled meat, such as bacon, ham, etc.,
15 pounds hearts (beef or pork), Freeze-Em-Pickle cured.

To 100 lbs. of meat, as per above formulas, use the following seasonings and ingredients:

½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
1 pound Zanzibar-Brand Summer Sausage Seasoning,
2 ounces whole black pepper,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Remove the skins, sinews, blood clots, etc., from the meats. All the fat may remain on the meat.

Second.—This sausage should not be cut with a silent cutter, but with a chopping machine, or a meat grinder. The meat should be cut not finer than the size of a pea. If put through a meat grinder, use a plate with ¼-inch holes for the pork and fat. Put the beef and hearts through the 3/16-inch-hole plate. Then mix the meats together.

If the meat is to be chopped in a chopping machine, cut the beef and hearts first, and then add the pork, as the pork should be cut coarser than the rest of the meat.

Third.—After the meat is cut or ground put it into a mixing machine, or else mix by hand, and add the seasonings, "B" Condimentine, sugar, and Bull-Meat-Brand Flour.

Fourth.—After the ingredients and seasonings are thoroughly mixed into the meat, spread it 5 or 6 inches thick on clean boards placed on racks in a cooler. Allow the meat to remain there for 48 hours, at a temperature of 38 to 40 degrees F. Then mix and stuff it

into beef middle casings, not more than 14 to 15 inches long.

Fifth.—If these sausages are made during the summer months when it is warm, it is necessary to hang them back in the cooler, after they are stuffed, for one to two days, and allow them to cure. In winter simply hang them in a dry cool room to dry.

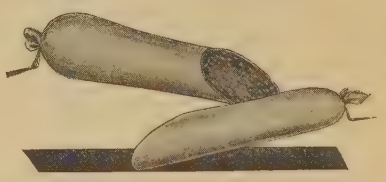
During the summer months, when they are hung in a cooler it is best to keep them at about 40 degrees; but in winter, when the sausages are hung in a dry room, even if the temperature should run up as high as 60 degrees, it will do no harm: nevertheless, it is best to keep it down (as close to 45 degrees as possible), but do not allow the meat or sausage to freeze.

Sixth.—After the sausage has dried a few days it is ready to be smoked. Smoke farmer sausage from 24 to 30 hours in a cold smoke. For home consumption, this sausage is ready for sale right after it is smoked, but for shipment it should hang one to two weeks after smoking, to dry in a cool dry room at a temperature of from 48 to 56 degrees F.

Sometimes, if the weather is damp, it takes even longer than two weeks to dry them. At least they should hang until they are dry enough to suit the trade before being shipped. If they are to be wrapped in tin foil, they must be perfectly dry before being wrapped, otherwise they will mold under the tin foil.

Gotha Cervelat or Summer Sausage

(High Grade)



65 pounds pork trimmings (lean), Freeze-Em-Pickle cured,
20 pounds back fat (salted), sliced into pieces about ¼ inch thick,
15 pounds beef trimmings (of best quality), Freeze-Em-Pickle cured.

First.—Carefully trim out all sinews. If you have a chopper, put all of the above meats into it—first the beef, then the pork, and then the fat. Let the machine run until the meat is cut nice and fine.

Second.—After the chopper has made two revolutions, add the following seasonings and ingredients:

1 pound Zanzibar-Brand Summer Sausage Seasoning,
8 ounces granulated sugar,
¼ to ½ pound "B" Condimentine,
3 ounces whole white pepper: add this last.

Third.—Continue the chopping until the meat is cut very fine.

After taking the meat out of the chopper, spread it 5 or 6 inches thick on boards, and cover neatly with white parchment paper.

Fourth.—Then put it into a cooler or refrigerator at a temperature of about 38 to 40 degrees F., and let it remain in the cooler two days to allow the meat to cure.

Fifth.—Remove it from the cooler and mix it by hand or in a power mixer, just enough to make the meat pliable. But do not mix it too much: the less it is mixed, the better.

Sixth.—Then stuff it into hog bungs about 20 inches long.

Seventh.—After stuffing, hang the sausage in a cold drying room for two weeks, keeping the temperature as near 40 to 45 degrees as possible. The third week increase to between 48 and 56 degrees, and keep it at that temperature for a few days.

Eighth.—Then hang the sausage in the smokehouse and give it a cool smoke for about three days and nights. After the sausage is smoked, hang it in a dry room at a temperature of 45 to 55 degrees and keep it there a couple of weeks until medium dry. It will then be ready for shipment.

This formula makes the finest summer sausage that can be made and it commands the highest price.

Note.—One must be equipped with the proper kind of machinery and cooler and adhere strictly to the temperature prescribed with this formula to get the best results. This sausage can be made with a meat grinder, but a silent cutter with sharp knives would be better. For a silent cutter the meat must be as cold as possible when put into the machine so that the operation may neither heat nor sour the meats.

Danish Cervelat

(Cervelatpölse)

40 lbs. beef trimmings, Freeze-Em-Pickle cured,
40 lbs. pork trimmings, Freeze-Em-Pickle cured,
20 lbs. pork fat back, Freeze-Em-Pickle cured,
¼ to ½ lb. "B" Condimentine,
½ lb. granulated sugar,
1 lb. Zanzibar-Brand Summer or Cervelat Sausage Seasoning,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Run the fat through the ¼-inch-hole plate of the meat grinder.

Second.—Run the beef and pork trimmings through the 1/8-inch-hole plate of the meat grinder. Put the meat, fat and all other ingredients into a tub or into the mixing machine and mix thoroughly.

Third.—Stuff into beef middles 16 to 18 inches long.

Fourth.—Place in a smokehouse and give a hot smoke until the sausages are well smoked and quite brown.

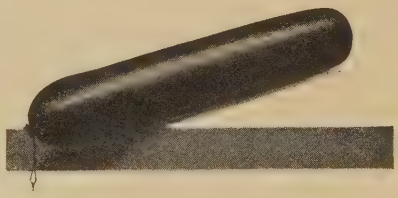
Fifth.—As soon as they are smoked, place in hot water, and cook, at a temperature of 155 degrees F. for 30 minutes to one hour, depending upon the thickness, until they are done. To test this sausage to determine whether it is cooked through drop it on a table: if it rebounds like an inflated tire tube, it is cooked through; but if it does not rebound, it is not cooked through. This is the way of testing all kinds of sausages to see if they are done, especially bologna.

In Denmark this sausage is always colored on the outside, as the Danish people like them of a dark color. To color, dip them in a solution of Zanzibar-Brand Casing Brown Mixture or color the cooking water with it. This is a harmless coloring and its use is allowed by the United States government. Directions for coloring sausage casings are given on pages 163 to 165.

Danish Summer Sausage

(Spegepölse)

40 pounds beef trimmings (Freeze-Em-Pickle cured),
45 pounds pork trimmings (Freeze-Em-Pickle cured),
15 pounds pork back fat (Freeze-Em-Pickle cured),
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
1 pound Zanzibar-Brand Swedish Metvurst Sausage Seasoning,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.



Spegepölse is the favorite sausage in Denmark. It is on the order of our American cervelat sausage. Americans like this sausage very much and, being very simple to make, it can be manufactured in an ordinary meat market. It is made as follows.

The beef and pork trimmings should be trimmed free of sinews and bones. The fat can be left on the meat. Cure the meat according to our directions on pages 171-173. The back fat should be cured in boxes or in the dry-salt floor cure.

When using a meat grinder, make the sausage as follows.

First.—Mix the beef, pork, fat, Bull-Meat-Brand Flour, and seasonings together and put the mixture through the 3/16-inch-hole plate of the meat grinder.

Second.—After the meat is ground, mix it thoroughly by hand until the fat is evenly distributed: then stuff it into beef middle casings about 18 inches long. Stuff as tightly as possible: the tighter they are stuffed the better the sausage will be. Another important point to remember is that the meat when taken out of the cooler should be ground and stuffed as quickly as possible, so that it is cold when being stuffed. The colder and stiffer it is, the tighter the sausage can be stuffed.

Third.—As soon as the sausages are stuffed, lay them into tubs or vats—even boxes can be used—and cover them with fine salt. Then place them in a cooler and keep them at a temperature of about 40 to 45 degrees F. Allow them to remain in the salt to cure for four to six days.

Fourth.—Then take them out, wipe off all the salt and dip them in cold water to wash it off, and hang them to dry in a well ventilated room that is kept at a temperature of about 50 or 60 degrees. If no room as cool as this is available, hang them in any dry room and keep the temperature as low as possible. If the sausages are made in summer when it is very hot, we advise hanging them in the cooler for a week, after they are taken out of salt. They should then be hung in the open and left to dry until they are ready to smoke.

Fifth.—Hang the sausage in the smokehouse and smoke it with a cold smoke from one to two days. They are then ready for sale. This sausage is eaten raw or cold: it is simply sliced into thin slices like summer sausage.

Instead of packing the sausage in dry salt, it can be placed in salt brine, testing about 60 degrees by the salimeter, for 4 to 6 days and then taken out and hung up dry. Some prefer the pickle and some the dry salt. It is a matter of choice.

The Bull-Meat-Brand Flour helps to dry the sausage. It absorbs the moisture in the meat and prevents it from getting hard and dry as when made without the Bull-Meat-Brand Flour.

Salchichon De Vich

Salchichon de Vich, Spanish cervelat sausage, should be made in the same maner as Gotha-style (page 259) except that a half ounce to an ounce of Zanzibar-Brand Imitation Brandy Flavor should be added to the 100-pound batch.

Thuringian Mettwurst

Formula No. 1

100 pounds medium fat pork trimmings, Freeze-Em-Pickle cured.

Formula No. 2

80 pounds pork trimmings, Freeze-Em-Pickle cured,
20 pounds beef trimmings, Freeze-Em-Pickle cured.

Formula No. 3

50 pounds pork trimmings, Freeze-Em-Pickle cured,
20 pounds hog cheek meat or head meat, Freeze-Em-Pickle cured,
30 pounds beef trimmings, Freeze-Em-Pickle cured.

Formula No. 4

20 pounds beef trimmings, Freeze-Em-Pickle cured,
40 pounds hog cheek meat, Freeze-Em-Pickle cured,
30 pounds fat pork trimmings, Freeze-Em-Pickle cured,
10 pounds fresh plain tripe.

Formula No. 5

15 pounds beef trimmings, Freeze-Em-Pickle cured,
30 pounds mutton trimmings, Freeze-Em-Pickle cured,
10 pounds tongue or neck trimmings, Freeze-Em-Pickle cured,
25 pounds fat pork trimmings, Freeze-Em-Pickle cured,
20 pounds fresh plain tripe.

How to Prepare

First.—Run the pork trimmings through the ¼-inch-hole plate and all the other meats through the 5/64-inch-hole plate of the meat grinder.

Second.—Then place the meat and following ingredients in the mixer, or mix by hand in a tub or vat.

1 pound Zanzibar-Brand Mettwurst Seasoning,
¼ to ½ pound "B" Condimentine,
½ ounce whole mustard seed,
½ pound granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

Third.—When the meat is thoroughly mixed, stuff it into beef rounds and tie in one-pound rings, leaving one inch of twine between the ends to hang on the sausage sticks.

Fourth.—Hang in the smokehouse and give them a cool, slow smoke for about 36 hours (about the same as summer sausage), or until they have a nice brown appearance. Some sausage makers hang

mettwurst in a cooler or a cold room to cure and dry for a week before smoking. This is advisable where the sausage is to be shipped a great distance after it is smoked. For home consumption, smoke as soon as stuffed.

This sausage must have plenty of fat; therefore, do not trim any of the fat off the meat. Use medium fat trimmings. If the meat used in this sausage is too lean the color will be a dark red, and will not have the correct appearance of mettwurst. They are sold as soon as taken out of smoke, for the consumer does not want them dry. Mettwurst is eaten raw, as is summer sausage.

Swedish Metvurst

60 pounds beef (boneless chucks, briskets and shank meat can be used), Freeze-Em-Pickle cured,
30 pounds pork ham trimmings, Freeze-Em-Pickle cured,
10 pounds pork back fat, Freeze-Em-Pickle cured,
¼ to ½ pound "B" Condimentine,
8 ounces granulated sugar,
1 pound Zanzibar-Brand Swedish Metvurst Seasoning,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Before being made into sausage, the back fat must be dry salted for two weeks in order to get it properly cured and firm.

Second.—Cut the pork back fat into half-inch cubes by hand or with a pork back fat cutting machine.

Third.—Mix the beef and pork back fat and run it through the ¼-inch-hole plate of the meat grinder.

Fourth.—After grinding, put the meat into a tub or trough, add the Bull-Meat-Brand Flour and all the other ingredients and knead until well mixed.

Fifth.—Pack the meat tightly into 50-pound pans or boxes and place these in a cooler having a temperature of about 40 degrees F. These pans or boxes should be shallow and not over 6 or 8 inches deep, so that the meat may be thoroughly chilled through. They should remain in the cooler 4 to 6 days, after which the meat will be ready to be stuffed into casings.

Sixth.—Stuff into beef middles and hang them in a dry room in a temperature of about 48 to 56 degrees for two or three weeks.

Seventh.—Smoke the sausage about two days with cool smoke made with saw dust. They are then ready for the market.

Göteborg or Swedish Sausage

60 pounds beef trimmings, Freeze-Em-Pickle cured,
10 pounds pork back fat, Freeze-Em-Pickle cured,
30 pounds pork trimmings, Freeze-Em-Pickle cured.

First.—Mix the beef, pork and fat and run the mixture through the ⅛-inch-hole plate of the meat grinder.

Second.—Then put it into the mixing machine or mix by hand and add the following ingredients while mixing:

1 pound Zanzibar-Brand Summer Sausage Seasoning,
½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
1 ounce finely ground cardamon seed,
Salt, to taste if it needs it,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

Third.—After the meat is chopped and mixed, spread it, 5 or 6 inches thick, on boards and place it on racks in the cooler, at a temperature of 38 to 40 degrees F. Allow it to remain in that temperature for two days.

Fourth.—Then take it out of the cooler, mix it again so it will stuff easily and stuff it into beef middles, about 14 to 18 inches long. After they are stuffed put them into vats or troughs and cover them with brine, testing 80 degrees by the salimeter. Make the brine of nothing but salt and water. Allow the sausages to remain in the brine for two or three days at a temperature of about 40 degrees F.

Fifth.—Then take them out, rinse them with fresh water and put them into a smokehouse. Smoke them with a cold smoke until they have a heavy smoke color which will take about three days.

Another way to make this sausage is to hang it in a cooler for two or three days, at a temperature of 38 to 40 degrees, instead of putting it into a brine. It will have a different flavor when hung in the cooler than when put into the brine. The brine gives the real Swedish-flavor and appearance.

This sausage can be made by any butcher or small sausage maker, especially those who have only a meat grinder. An easy way where one has no mixing machine is to mix the trimmings, fat and all ingredients, before grinding the meat. Then it is fairly well mixed when ground and will require very little mixing by hand after grinding.

Holstein Sausage

Formula No. 1

50 pounds pork trimmings (Freeze-Em-Pickle cured),
40 pounds beef trimmings (Freeze-Em-Pickle cured),
10 pounds pork back fat (Freeze-Em-Pickle cured),
¼ to ½ pound "B" Condimentine,
8 ounces granulated sugar,
1 pound Zanzibar-Brand Summer Sausage Seasoning,
2 ounces white coriander seed,
1 teaspoonful Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Before being made into sausage, the back fat must first be dry-salt cured for at least two weeks in order to get it properly cured and firm. Then cut into small cubes.

Second.—Put the beef trimmings through the 3/16-inch-hole plate of the meat grinder and the pork and pork fat through the ¼-inch-hole plate. Put all in a mixer or mix by hand and, while mixing, add the seasoning and Bull-Meat-Brand Flour.

Third.—After the meat is chopped and spiced spread it, 5 or 6 inches deep, in shallow boxes or pans, and place them in the cooler. Keep the meat in the cooler for 24 hours that it may be thoroughly cured before stuffing.

Fourth.—Stuff into beef round casings and let the sausage hang in a dry room at a temperature of 48 to 56 degrees F. for a week to ten days.

Fifth.—Then give the sausage a cold smoke for two or three days and it will be ready for the market when taken out of smokehouse.

Formula No. 2

50 pounds pork trimmings, medium fat, Freeze-Em-Pickle cured,
50 pounds lean beef trimmings, Freeze-Em-Pickle cured.

Formula No. 3

40 pounds beef trimmings, Freeze-Em-Pickle cured,
20 pounds beef hearts, Freeze-Em-Pickle cured,
20 pounds pork cheek meat, Freeze-Em-Pickle cured,
20 pounds fat pork trimmings, Freeze-Em-Pickle cured.

Do not trim the meats except to remove the skins, sinews, blood clots, etc. All the fat can remain on the meat.

First.—Run the beef and hearts through the ⅛-inch-hole plate and

the pork and fat through the ¼-inch-hole plate of the meat grinder.

Second.—If the meat is chopped with a chopper or silent cutter, the seasonings and ingredients can be added while chopping; but if ground in a meat grinder, it must be mixed in a power mixer, or by hand in a tub, adding the seasonings and ingredients while mixing.

Third.—After the meat is ground and mixed, it should be placed in the cooler 5 or 6 inches deep, upon boards, and remain there one to two days in a temperature of about 40 degrees F. It is then ready to be stuffed into beef round casings.

Fourth.—If the sausages are stuffed during the summer months, it is necessary to hang them back in the cooler for one or two days to allow them to cure; in winter months or cooler weather hang them in a dry, cool room. During the summer months the temperature of the cooler in which they are hung should be kept at about 40 degrees, so as to give the meat a chance to cure, but in winter months they can be hung outside, even if the temperature runs up to 56 degrees. As long as the atmosphere is dry, 56 degrees will not injure them.

Fifth.—Smoke the holsteiner from 24 to 48 hours in as cool a smoke as possible.

For home consumption holsteiner is ready to be sold right after being smoked; but for shipment they should hang for a few days until dry, depending upon the weather.

How to Color Casings for Holsteiner

See directions for momentary dipping on page 158. This method can be used equally well on the empty casings. After the casings have a light orange color take them out of the solution and wash well in hot water, cut and tie them, then stuff the casings, and hang the sausage up to dry.

After the sausage has hung for a few days to dry, hang it in the smokehouse for a few days to give it a smoked flavor, whereupon it will be ready for shipment. This will save a large shrinkage and the sausage will have a better appearance. Sausage that has had the casing colored before being stuffed need not be exposed to the heat in the smokehouse, especially in summer or in a warm climate, as this often causes the sausage to become rancid. Heat causes the stearin and oil in the fat to separate, and as soon as this change takes place the sausage begins to become rancid.

Landjaeger Sausage

(Hunters)

60 pounds lean beef, Freeze-Em-Pickle cured,
40 pounds fat pork trimmings, Freeze-Em-Pickle cured.

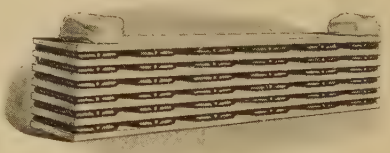
First.—Run the beef and pork through the ⅛-inch-hole plate of the meat grinder.

Second.—Place the meats in a sausage mixer or mix by hand and add the following seasonings and ingredients:

8 ounces granulated sugar,
1 pound Zanzibar-Brand Summer Sausage Seasoning,
1½ ounces finely powdered caraway seeds,
1 ounce Zanzibar-Brand Pure Garlic Powder,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

Third.—Mix well together and then stuff into hog casings. Cut off in double links, having each link about five or six inches long. This sausage should be stuffed loosely, the casings should only be about half full. Before cutting the casings into links the meat is separated so that there is about ½ inch of casing empty at each end; then lap the empty end of the sausage casing over on the sausage so as to close the end.

Fourth.—Lay the sausage on a board; insert a small square stick between each pair of sausage links (the sticks about a quarter of an inch square); then lay another board on top of the sausage and put on a weight so as to press the sausage flat.



LANDJAEGER IN PRESS

Fifth.—Place the boards upon which the sausages have been laid on shelves in a cooler and keep them there, at a temperature of about 38 to 40 degrees F., for three to four days. This allows the meat to cure and makes the sausages set, so that when they are taken off the boards they will keep the shape that they are pressed in.

Sixth.—Remove the boards from the cooler, take the sausages off, hang them on small iron rods, and put them in the smokehouse; give them a cold, slow smoking for 24 hours, after which time they should be dry enough (when cooled off) to be ready for sale or shipment.

Peperoni Sausage

Formula No. 1

80 pounds pork trimmings, not too fat (Freeze-Em-Pickle cured),
20 pounds beef trimmings (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Summer Sausage Seasoning,
¼ pound Zanzibar-Brand Chile Powder,
½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Run the pork trimmings through the ¼-inch-hole plate of the meat grinder and the beef trimmings through the ⅛-inch.

Second.—Then place both in a power mixer or mix by hand, adding the seasonings and all other ingredients.

Third.—After the above is thoroughly mixed stuff into beef round casings, in long strings 4 or 5 feet long.

Fourth.—Tie into links 5 inches long with stout twine, hang them over sausage sticks, and place them in the dry room at a temperature of 48 to 56 degrees F., or as near this as possible, for a few days until the sausage is dried.

Fifth.—Hang sausage in smokehouse for two or three days and give them a cool, slow smoke. They are then ready for sale.

Formula No. 2

50 pounds pork trimmings (Freeze-Em-Pickle cured),
30 pounds pork head or cheek meat (Freeze-Em-Pickle cured),
20 pounds beef trimmings (Freeze-Em-Pickle cured).

Run the beef trimmings and head or cheek meat through the ⅛-inch-hole plate of the meat grinder and the pork trimmings through the ¼-inch. Put all into a mixer or mix by hand in a clean tub, and add the seasonings and other ingredients. Stuff, dry and smoke as directed in Formula No. 1 (Peperoni sausage).

This sausage is eaten as it is. It is not cooked.

See to it that there is enough fat on the meat: otherwise, fat must be added or the sausage will be too dry.

Fancy Italian Salami

50 pounds pork trimmings, well trimmed, free of fat and sinews (Freeze-Em-Pickle cured at least 10 to 14 days),
20 pounds beef trimmings of the best quality, well trimmed, free of fat and sinews (Freeze-Em-Pickle cured for at least 10 to 14 days),
30 pounds back fat that has been dry salted at least 20 days, cut into ¼-inch cubes,
1 pound Zanzibar-Brand Salami Sausage Seasoning,
8 ounces granulated sugar,
2 ounces Zanzibar-Brand Garlic Compound,
1 ounce Zanzibar-Brand Imitation Brandy Flavor,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Put the beef through the 3/16-inch-hole plate of the meat grinder and the pork through the ¼-inch-hole plate.

Second.—Place the beef, pork and fat in a power mixer; then add the Zanzibar-Brand Salami Sausage Seasoning, granulated sugar, Zanzibar-Brand Garlic Compound, Brandy Flavor, "B" Condimentine, and mix thoroughly. If you have no power mixer, mix by hand, but be very careful to get the seasonings and ingredients evenly distributed.

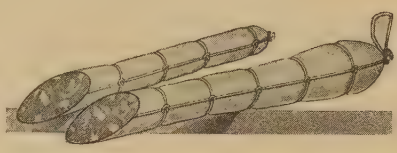
Third.—When the meat and seasonings are well mixed, pack tightly into a tub or barrel and place it in a cooler for 24 hours at a temperature of 38 to 40 degrees F.

Fourth.—After 24 hours, stuff into large beef middles about 12 to 14 inches long. Wrap the sausage with a good grade of twine, the loops about one-half inch apart, bringing the twine back on the opposite side and securely tying each loop. Make a loop at one end for hanging.

Fifth.—Hang it in a room to dry. Keep the temperature as near 48 to 56 degrees as you can until they are dry enough for the market.

These sausages are not smoked: they are simply air-dried and must be nice and dry before they are shipped or offered for sale. Some sausage makers soak the casings in 40-grain white distilled vinegar over night before stuffing: they then remove the casings from the vinegar, place them in warm water, and stuff them. This is done to prevent mold forming on the casings.

Genoa Salami



50 pounds lean pork trimmings (Freeze-Em-Pickle cured),
35 pounds lean beef chucks, without sinews (Freeze-Em-Pickle cured),
15 pounds pork back fat (Freeze-Em-Pickle cured),
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
1 pound Zanzibar-Brand Salami Sausage Seasoning,
2 ounces Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Run the beef and the pork through the ¼-inch-hole plate of the meat grinder.

Second.—Then add the pork back fat, properly diced or cut into ¼-inch cubes, and all the seasoning. Mix well by hand or in a machine so as not unnecessarily to crush the diced fat.

Third.—When well mixed, spread 6 to 8 inches thick on boards or trays and place these in a cooler or refrigerator held as near the regular curing temperature of 38 to 40 degrees F. as circumstances permit. Leave them there 48 hours.

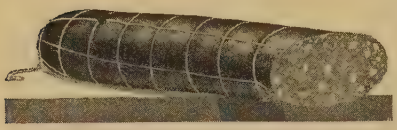
Fourth.—Stuff into hog bungs cut 20 to 24 inches long. Hang in an ordinary dry ice box or cooler.

Fifth.—After hanging till firm and dry on the surface, about 36 to 48 hours, wrap with flax twine, starting at the small end, the loops two inches apart with slip hitch knots. If the casings are weak, it may be necessary to do the wrapping immediately on the stuffing bench.

Sixth.—After hanging in the ice box or cooler 36 to 48 hours after stuffing, hang the sausage in the dry room, at a temperature of 48 to 56 degrees. This sausage is not smoked and should hang until dry before using or shipping. Salami is eaten as it is when dry without first cooking.

Meats for summer sausages and salamis are coarsely cut. For that reason, they have, heretofore, been chopped on the block, either with cleavers or with rocker knives. The rotary cutter is now used in larger plants because it is more rapid. But the butcher with only an ordinary meat grinder can make any sausage others turn out with costlier equipment, and turn out a fine product, if he will use in his grinder the kind of cutting plate we advise, have plate and knives sharp, and follow our directions in other things.

Lombardia Salami, Air Dried



60 pounds pork trimmings, medium fat (cured with Freeze-Em-Pickle),
20 pounds beef chuck meat (cured with Freeze-Em-Pickle),
20 pounds back fat, cut into 3/8-inch cubes (cured with Freeze-Em-Pickle),
1 pound Zanzibar-Brand Salami Sausage Seasoning,
2 ounces Zanzibar-Brand Garlic Compound,
½ ounce Zanzibar-Brand Imitation Brandy Flavor,
8 ounces granulated sugar,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Run the pork through the 3/8-inch-hole plate and the beef through the ¼-inch-hole plate of the meat grinder.

Second.—Then put the meat into a power mixer, or mix by hand, and add the seasonings and all other ingredients while mixing.

Third.—After the meat and other ingredients are well mixed, spread it 6 or 8 inches thick, on boards, and put into a cooler or refrigerator for 48 hours at a temperature of 38 to 40 degrees F.

Fourth.—Then mix by hand till the meat is soft enough for stuffing and stuff it into beef middles, 2½ or 3 inches in diameter and about 14 inches long.

Fifth.—Hang the sausages in a dry room at a temperature of about 48 to 56 degrees and keep them there until dry and of a nice red color on the outside.

Sixth.—After the sausage begins to show color on the outside, tie it with strong fine twine, making one-inch squares on the sausage.

Seventh.—Lower the temperature down to 40 or 45 degrees and maintain that temperature as evenly as possible until dry and ready for market.

These sausages are simply air dried and are not smoked; therefore they must hang in a cool, dry room until they are solid and firm. The mixture for Lombardia sausage should show about one-third fat and two-thirds lean when it is sliced. All the hard fat is left on the pork that it may show the right proportion.

The above sausage is a fancy salami and brings a fancy price from the upper class of French and Italian people. The twine used in cording the imported sausage is very thin, and almost white in color, like bookbinders' twine. This kind should be used on Lombardia Italian sausage.

Milan Salami

Popular Sausage with the Italian Trade

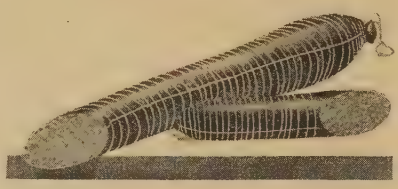
The best quality is usually made of all pork, which must be thoroughly lean, and all of the soft fat must be trimmed from the meat.

Formula No. 1

80 pounds lean pork trimmings (Freeze-Em-Pickle cured),
20 pounds back fat, cut into ¼ to ⅜-inch cubes (Freeze-Em-Pickle cured).

Formula No. 2

60 pounds lean pork trimmings (Freeze-Em-Pickle cured),
20 pounds lean beef trimmings (Freeze-Em-Pickle cured),
20 pounds back fat, cut into ¼ to ⅜-inch cubes (Freeze-Em-Pickle cured).



First.—If using beef, run it through the 3/16-inch-hole plate of the meat grinder; if using all pork, run it through the ¼-inch-hole plate.

Second.—Then add the pork-back fat, cut into cubes, and to every 100 pounds of meat add the following ingredients and seasoning, mixing well by hand or in a power mixer:

1 pound Zanzibar-Brand Salami Sausage Seasoning,
½ pound granulated sugar,
2 ounces Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

Third.—After the meat is well mixed by hand or by machine, spread it 5 or 6 inches thick on boards; then place these in a cooler or refrigerator for 48 hours at a temperature of 38 to 40 degrees F.

Fourth.—Stuff into good size hog bungs, 24 to 26 inches long. The best grade is stuffed into the larger size bungs.

Fifth.—When stuffed hang the sausage in a drying room and allow it to remain at a temperature of 48 to 56 degrees until it is dry and has a nice color on the outside.

Sixth.—When medium dry it must be corded with a good quality of twine. First tie the twine at the crown, extend it to the bottom of the sausage and tie there. Then run it back to the crown and tie again. Now wind the twine around the sausage about three coils to the inch, to the bottom, and tie the ends. Then hang the sausage back in the dry room and let it finish drying until ready for sale. This salami is not smoked.

D'Arles Sausage

(A Popular French Salami)

Formula No. 1 (Best Quality)

80 pounds pork trimmings, with all the soft fat trimmed off; the meat should be fairly lean and Freeze-Em-Pickle cured,
20 pounds back fat, cut in ½-inch cubes.

Formula No. 2 (Very Good Quality)

50 pounds pork trimmings, Freeze-Em-Pickle cured,
30 pounds beef trimmings, Freeze-Em-Pickle cured,
20 pounds back fat, cut in ½-inch cubes.

Formula No. 3 (Cheap Quality)

30 pounds beef trimmings, Freeze-Em-Pickle cured,
20 pounds pork cheek meat, Freeze-Em-Pickle cured,
30 pounds pork trimmings, Freeze-Em-Pickle cured,
20 pounds back fat, cut in ½-inch cubes.

Note.—Leave all the hard fat on the meat, but trim off all the soft fat. This sausage should not have small pieces of fat mixed through the meat, only the large pieces of hard fat.

First.—The meat should be cut into pieces of about ⅜ inch. It is best to cut this on a chopper, but if one has no chopper, it can be ground through a meat grinder, using the ⅜-inch-hole plate.

Second.—Put the meat into a sausage mixer after it is ground, add the fat cubes and the following seasonings and ingredients:

½ pound granulated sugar,
1 pound Zanzibar-Brand Salami Sausage Seasoning,
2 ounces Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine.

If one has no sausage mixer, it may be mixed by hand, but better results can be obtained by mixing it in a power mixer.

Third.—Mix all together thoroughly with the meat and then spread it out five or six inches thick on boards. Place it in a cooler at a temperature of 38 to 40 degrees F. for two days and two nights.

Fourth.—Remove it from the cooler, work it well and mold into round balls.

Fifth.—Pack these into the sausage stuffing machine, and stuff them into large size No. 1 hog bungs about eighteen inches long. One should be careful not to allow any air or vacant spaces to remain in the sausage, but should stuff firmly and compactly.

Sixth.—After stuffing, hang the sausages as far apart as possible in a dry room and keep them at a temperature as near 45 to 50 degrees F. as possible, allowing them to hang until they are dry and have a nice reddish color.

These sausages are wrapped with cord, so as to show diamond

shape cording. This is done by starting at the top and winding the string spirally to the bottom, securely tying there, and then winding upward, across the downward cording, and tying securely at the top. This method forms a diamond shape mesh over all the sausage.

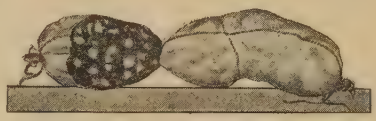
Leona Salami

This is a choice salami, made like D'Arles. The cording or wrapping may be diamond shaped like D'Arles, or square like **Alexander** salami.

ALEXANDER SALAMI

Sobreasada

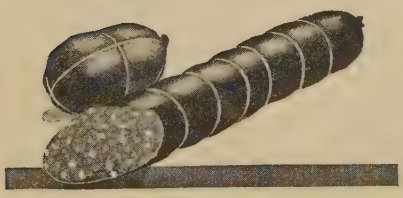
(Salami in Frizzles or Hog Middles)



The same kind of meat as in D'Arles (see opposite page) is used and treated in the same way. Instead of white whole pepper, use black whole pepper. After it is all mixed, stuff into hog middles, 1½ to 2 inches in diameter and 8 to 10 inches long. In selecting the casings reject those that are wider or narrower. Manage exactly the same as for other dry sausage. On account of the casings being so tender, when stuffed, string is tied at both ends. This sausage is tied off at the bottom; the string is looped in the center of the sausage, and the ends tied at the top so that when the sausage is hung up the string helps to support it. This is an air dried sausage and is hung in a dry room at a temperature of 48 to 56 degrees F. until it is dry and ready for shipment.

Note.—Frizzles are a casing produced from the hog the same as the beef bung is produced from cattle; instead of it being smooth like the beef bung, it is frizzed or wrinkled: hence the name frizzles.

German Salami



Formula No. 1

50 pounds pork trimmings, well trimmed (Freeze-Em-Pickle cured),
30 pounds beef, good quality, trimmed free of sinews and fat (Freeze-Em-Pickle cured),
20 pounds back fat (Freeze-Em-Pickle cured) cut into cubes of ¼ to ⅜ inch,
1 pound Zanzibar-Brand Salami Sausage Seasoning.
2 ounces Zanzibar-Brand Garlic Compound,
½ pound granulated sugar,
¼ to ½ pound "B" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Run the beef through the ⅛-inch-hole plate and the pork through the ¼- or ⅜-inch-hole plate of the meat grinder.

Second.—Then mix the ground beef and the ground pork with the cubes of fat, by hand or with a mixing machine, and add seasonings and other ingredients while mixing.

Third.—After the meat is chopped and thoroughly mixed, spread it about 6 to 8 inches thick on boards. Allow it to remain in the cooler on shelves at a temperature of 38 to 40 degrees F. Keep it at this temperature for 24 hours.

Fourth.—After it has cured in the cooler, take it out and mix it enough by hand to soften it: then stuff into calf bladders or beef middles.

Fifth.—Hang them in a well ventilated, dry room, at as near 45 degrees as can be maintained. After 36 hours raise the temperature to 55 degrees, and keep it at that until the sausages have a nice red appearance on the outside, whereupon they will be ready to smoke.

Sixth.—Smoke for about 36 hours in as cool a smoke as possible.

Seventh.—After smoking hang the sausage in a dry room, for several days, quite close together. Hanging them closely together at this time gives the meat a chance to set, and prevents the sausage from shrinking too fast and developing hollow centers. After a few days they must be hung apart so that the air may circulate between them to dry them. Keep the temperature at between 48 and 56 degrees F.

Eighth.—The wrapping of salami with twine or cord may be done either before they go into the smokehouse or after they come out of it. If they are wrapped before smoking, the strings become loose after they are smoked, but if the strings are tied after they are smoked they remain tight and will not fall off. Tie the strings on the bladders crosswise: the middles should be tied about one inch apart.

Formula No. 2

60 pounds lean beef (Freeze-Em-Pickle cured),
40 pounds pork trimmings, quite fat (Freeze-Em-Pickle cured).

Formula No. 3

40 pounds beef trimmings (Freeze-Em-Pickle cured),
40 pounds pork, very fat, regular trimmings (Freeze-Em-Pickle cured),
20 pounds pork cheek meat (Freeze-Em-Pickle cured).

Formula No. 4

30 pounds beef trimmings (Freeze-Em-Pickle cured),
20 pounds beef or pork hearts (Freeze-Em-Pickle cured),
20 pounds pork cheeks or head meat (Freeze-Em-Pickle cured),
30 pounds fat pork trimmings (Freeze-Em-Pickle cured).

Grind the meat, mix, add seasonings and ingredients the same as in Formula No. 1 and smoke and dry in the same manner.

When hearts are used in salami sausage, grind them through the ⅛-inch-hole plate. Grind the other meats more coarsely.

NOTE.—If one has only a meat grinder and no mixer, the meat and ingredients should be mixed by hand in a large tub or trough after grinding. In manufacturing salami it is necessary to handle the meat as cold as possible.

Cooked Salami

50 pounds lean boneless chucks or other lean beef (trimmed free of sinews and Freeze-Em-Pickle cured).
30 pounds lean pork trimmings (Freeze-Em-Pickle cured),
20 pounds firm, pork back fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Salami Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
1 ounce Zanzibar-Brand Imitation Brandy Flavor,
1 ounce Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour, in the proportion allowed by your state food law.

First.—Put the beef and fat through the 3/16-inch-hole plate of the meat grinder and the pork through the ¼-inch-hole plate.

Second.—Put all the ground meat into the power mixer, add the other ingredients and mix thoroughly, or mix by hand in a tub.

Third.—Spread the mixture 6 to 8 inches deep on a tray or shelf in the cooler, at a temperature of 38 to 40 degrees F. and keep it there 24 hours.

Fourth.—Stuff into sheep bungs about 2½ inches in diameter, wrapping with twine or not wrapping, according to local preference.

Fifth.—Hang the stuffed sausage back in the cooler for a day or two to develop color: then place in water at a temperature of 150 degrees F. and cook at this temperature for 2 or 3 hours, according to thickness. After cooking hang them in the smokehouse, and give them a cold smoke for 20 to 24 hours.

Sixth.—Remove from smokehouse, hang in the dry room till cooled and they are ready to be sold.

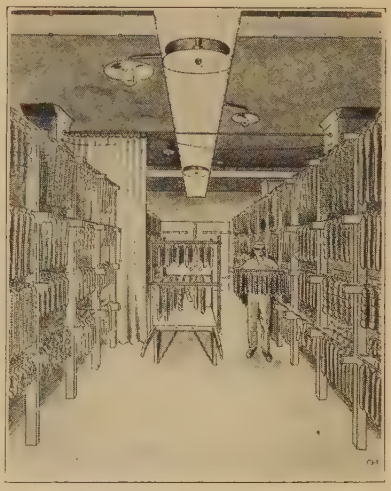
Sausage Drying

Air - dried sausage is neither smoked nor cooked. Its keeping quality depends entirely on correctly Freeze-Em-Pickle curing the meats which enter into it, and drying out the moisture at a temperature ranging between 48 and 56 degrees F. The relative air moisture (humidity) should range between 65 and 80 per cent, according to the needs of the sausage. There must be proper ventilation and renewal of air without noticeable draught. Draught and excessive dryness cause "shell-drying" with soft centers, while excessive air moisture and lack of air renewal cause sliminess and mold.

A specially constructed dry room is a necessity if summer sausage is to be made on a commercial scale without regard to atmospheric conditions outside. An efficient commercial dry room is usually 12 to 16 feet high and may have hanging space for a large amount of sausage. With a 12-foot ceiling, each 1000 pounds of air-dried sausage needs (roughly) about 135 square feet of floor space. A section 16 feet square will hang about 1900 pounds. To maintain uniform temperature and to dry the atmosphere when necessary, there should be steam coils under the sausage and along the walls. Windows should be as evenly distributed as circumstances permit for proper ventilation. Another method of air renewal might have air conduits with inlets for properly conditioned air well distributed, and an opposing set to exhaust foul or moisture laden air. They are operated by means of suction and blower fans. Both the inlets and the outlets must be provided with shut-offs or regulators at each section. Posts or other floor supports at regular intervals (usually 16 to 18 feet) divide the floor space into square sections known as "bays". Canvas or burlap partitions may be hung temporarily to inclose any given section. In each such section similar

sausages may be grouped together for uniform treatment. Here they may be "banked" (that is, crowded together) to retard too rapid drying at the start while shielded from draught, or they may be hung apart while rapid air circulation within the inclosure hastens the drying after the first two weeks.

Permanent racks are built, with horizontal supports or wooden rails at several levels, in order that sausages may be hung without changing them from the smoke sticks on which they left the stuffing table. When those on the upper rails dry more rapidly than those on the lower, the entire section should be transferred to an adjoining section, changing the upper sausages to the lower rails and the lower sausages to the upper rails. Such change of position equalizes results.



SAUSAGE DRYING ROOM

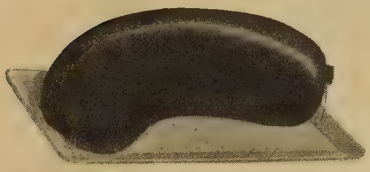
Mold is largely avoided where there is a well built dry room and proper supervision. If mold is developed during the drying process the sausages must be scrubbed clean. In large operations this is done on a summer sausage washing machine, which puts 27 sausage laden smoke sticks through the brushes per minute. Cleaned sausages are rehung in the racks until fully dried.

Summer sausage is marketed at various stages of the air-drying process, namely,

New sausage,
Medium dry,
Dry.

If it is not marketed when it reaches the final stage, it may be packed in boxes and carried at curing cellar temperature, which is 38 to 40 degrees F.

Kosher Bologna



70 pounds beef chuck trimmings, Freeze-Em-Pickle cured,
30 pounds trimmings, such as briskets, plates, etc.
1 pound Zanzibar-Brand Bologna Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
1 ounce Zanzibar-Brand Garlic Compound,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Put the beef into the silent cutter and chop fine or run through the 5/64-inch-hole plate of the meat grinder. While grinding, gradually add, little by little, the crushed ice or ice water.

Second.—When finely cut, add the Zanzibar-Brand Bologna Sausage Seasoning, "B" Condimentine, Zanzibar-Brand Garlic Compound, Bull-Meat Brand Flour, and sugar. Mix well until it is evenly mixed.

Third.—Then stuff into beef rounds to make round bologna, into beef middles to make long bologna, and into beef bungs to make large bologna. Hang in a medium warm smokehouse—first without smoke, then, when the sausage is dry on the surface, light the sawdust and smoke until the desired color is attained.

Fourth.—When smoked, cook the sausage as follows: round bologna 30 minutes in water held at 160 degrees F.; long bologna 40 to 60 minutes, according to thickness, at the same temperature; large bologna from 1¼ to 3 hours, according to thickness, at 155 degrees F.

Fifth.—When cooked, hang up and rinse with boiling water and then with cold water a few minutes. Then hang them in ordinary temperature for a few hours to cool before placing them in the ice box.

When required for sale or shipping purposes, dip a piece of clean cheesecloth in a little beef fat, wring the cheesecloth as dry as possible and rub the sausage all over with it. This gives it a lustrous, attractive appearance and tends to prevent mold.

Kosher Beef Sausage

(For Boiling)

50 lbs. beef trimmings, Freeze-Em-Pickle cured,
25 lbs. boned brisket trimmings, Freeze-Em-Pickle cured,
25 lbs. beef plate trimmings, Freeze-Em-Pickle cured,
1 lb. Zanzibar-Brand Frankfurt Sausage Seasoning,
¼ to ½ lb. "B" Condimentine,
1 oz. Zanzibar-Brand Garlic Compound,
½ lb. sugar,
No salt necessary,
Bull-Meat-Brand Flour in the proportion allowed by your state food laws,
Sufficient cracked ice or ice water to cool the meat while grinding, and to give it the proper consistency.

How to Prepare

First.—Put the beef trimmings and the plate beef through the 5/64-inch-hole plate of the grinder, and the brisket trimmings through the ¼-inch-hole plate and, at the same time, add sufficient cracked ice or ice water.

Second.—Put all the meat into a power mixer, or mix it by hand in a tub if you have not a mixer, and add the Zanzibar-Brand Frankfurt Sausage Seasoning, "B" Condimentine, Zanzibar-Brand Garlic Compound, Bull-Meat-Brand Flour, and sugar. Mix well.

Third.—When thoroughly mixed stuff into beef round casing linked off into 1-pound rings; hang in smokehouse and give a medium hot smoke. Let cool off before hanging in the refrigerator. They will then be ready for sale.

This sausage is not cooked when made. Before eating, it is cooked in water not hotter than 160 degrees F. for 30 minutes and served hot. It can also be sold in bulk with instructions to the customer, that it can be made into cakes and fried in hot fat like hamburger steak. It is very good this way.

Kosher Garlic Sausage

85 pounds beef trimmings, cured with Freeze-Em-Pickle,
15 pounds cured beef brisket fat,
¼ to ½ pound "B" Condimentine,
1 pound Zanzibar-Brand Bologna Sausage Seasoning,
2 ounces Zanzibar-Brand Garlic Compound,
½ pound granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient crushed ice or ice water to cool the meat while grinding and give it the proper consistency.

First.—Run the beef trimmings through the 5/64-inch-hole plate of the meat grinder, gradually adding the cracked ice or ice water while grinding. Grind the brisket fat through the 3/16-inch-hole plate.

Second.—Combine these in a sausage mixer, or if you have no sausage mixer, place the meat in a galvanized iron tub or a clean wooden tub or truck and add the "B" Condimentine, Zanzibar-Brand Bologna Sausage Seasoning, Zanzibar-Brand Garlic Compound, sugar, and Bull-Meat-Brand Flour. Mix for five minutes; then remove from the mixer and it will be ready to stuff into casings.

Third.—Stuff into beef round casings, about 1-lb. to the ring; make one twist in the center at the bottom of each sausage, thus making two links of it, and then tie the two ends together, leaving a 1-inch loop of twine between them. It may also be made in ring form without linking.

Fourth.—Smoke them in a medium warm smoke for two to three hours.

Fifth.—Remove them to a cooking tank, and cook them for thirty minutes in hot water at 155 degrees. If a bright color is desired, either color the cooking water or dip them, when cooked, in Zanzibar-Carbon-Brand Casing-Brown Mixture, following the directions on pages 163-165. Rinse the sausage first with boiling water and then with cold water. Then allow them to cool for one hour. Place them in a cooler and when chilled through they will be ready for sale.

The sausages are also sold after smoking, without being cooked. The customer cooks them and eats them hot out of the cooking water. In most cases they are cooked after smoking and sold in this form.

Kosher Bratwurst

40 lbs. fresh beef chuck trimmings,
60 lbs. fresh veal flank, briskets or trimmings,
1 lb. Zanzibar-Brand Frankfurt Sausage Seasoning,
1 oz. Zanzibar-Brand Garlic Compound,
¼ to ½ lb. "A" Condimentine,
2 lbs. salt,
½ lb. granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to cool the meat while grinding and to give it the proper consistency.

First.—Trim the meat thoroughly, remove every semblance of skin, sinews, blood clot, or bones, but leave the fat on the veal and beef.

Second.—Put the beef through the 5/16-inch-hole plate of the meat grinder, and the veal through the ⅛-inch-hole plate. Put these into a power mixer and start the machine running, gradually adding sufficient ice or ice water. Then add the Zanzibar-Brand Frankfurt Sausage Seasoning, Zanzibar-Brand Garlic Compound, "A" Condimentine, Bull-Meat-Brand Flour, and the salt.

Third.—Stuff immediately into narrow beef round casings or wide sheep casings and tie with thin twine into links about four inches long. Cut them four links to each length, hang them on sausage sticks, two links on each side, and they will be ready for sale.

Kosher-style bratwurst is very palatable when fried in fat after the manner of pork link sausage and eaten hot. If one wants them smoked they can be given a slow cold smoke until they have a light brown color. But as a rule they are sold fresh, unsmoked.

Kosher Frankfurts or Vienna Sausage

Kosher frankfurts and kosher Vienna sausage are made like kosher Bratwurst except that they should be smoked at medium heat, until they have a bright reddish-brown color. Then cook, not over 10 minutes, at a temperature of 155 to 160 degrees F.

Increase the Garlic Compound to 2 ounces for the 100 pounds of meat.

Kosher Liver Sausage

Formula No. 1

65 pounds veal,
25 pounds scalded and soaked calf liver,
10 pounds brisket fat.

Formula No. 2

40 pounds cooked calf head meat (the heads cooked till the meat can be stripped from the bones) or beef cheek meat,
30 pounds beef or calf liver, scalded and soaked,
15 pounds beef or calf hearts,
15 pounds beef tripe.

First.—Run the veal or the beef and hearts through the 5/64-inch-hole plate of the meat grinder. Work a little ice water into it while grinding: then put it into the power mixer or into a tub for hand mixing.

If the meat is chopped in the silent cutter, instead of grinding, the ice water should be slowly added while chopping, as no mixing is needed after it.

Second.—Grind the scalded liver through the 5/64-inch-hole plate of the meat grinder and add it to the ground or chopped meat in the mixer.

Third.—Cut the brisket fat into small cubes or run it through the ¼-inch-hole plate of the meat grinder and add it to the meat and liver. If tripe is used, run it through the finest plate of the meat grinder before adding it.

Fourth.—Before starting the mixer, add the following ingredients:

2 pounds finely chopped onions (if onions are desired),
2 pounds salt,
1 pound Zanzibar-Brand Braunschweiger Liver Sausage Seasoning,
¼ to ½ pound "A" Condimentine,
Bull-Meat-Brand Flour in the proportion allowed by your state food law,
Sufficient cracked ice or ice water to give the mixture the proper consistency.

Mix thoroughly, adding the remainder of the cracked ice or ice water slowly until the mixture is soft and pasty.

Fifth.—Stuff tightly into beef middles and cook 30 to 40 minutes at a temperature of 150 to 155 degrees F. Then chill the sausage through in cold water, dry it by hanging at room temperature, and then keep it in the cooler until sold.

Kosher Cervelat or Summer Sausage

75 pounds lean beef trimmings,
25 pounds fat beef brisket,
1½ pounds salt,
1 pound Freeze-Em-Pickle,
1 pound Zanzibar-Brand Summer or Cervelat Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

First.—Chop the beef trimmings medium fine and beef brisket coarse. While chopping, add all the other ingredients.

Second.—Pack the chopped meat tightly, not over 6 to 8 inches deep, into shallow pans or boxes holding about 50 pounds. Place these in the cooler, at a temperature of about 38 to 40 degrees F., for a period of 4 to 6 days, to cure.

Third.—Stuff into fully cured beef middles.

Fourth.—Hang in a dry room, at a temperature between 48 and 56 degrees F., for one to three weeks. They can then be sold or dried further. As soon as they are dry enough give them a cold smoke.

If a silent cutter or chopper is not available, grind the beef through the ⅛-inch-hole plate of a meat grinder and the briskets through the 3/16 or ¼-inch-hole plate. Then thoroughly mix the other ingredients into it.

Kosher Mettwurst

80 pounds beef chuck trimmings (Freeze-Em-Pickle cured,
20 pounds briskets (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand German Mettwurst Seasoning,
2 tablespoonfuls Zanzibar-Brand Garlic Compound,
¼ to ½ pound "B" Condimentine,
½ pound granulated sugar,
Bull-Meat-Brand Flour in the proportion allowed by your state food law.

How to Prepare

First.—Trim the meat thoroughly, cut it into pieces the size of a walnut, leaving all the fat on, but making sure that every particle of gristle, skin and bone is removed, and cure the meat for about one week with Freeze-Em-Pickle as per directions for curing sausage trimmings with Freeze-Em-Pickle.

Second.—Run all the meat and fat through the ⅛-inch-hole plate of the meat grinder.

Third.—Place it in a power mixer or mix it by hand; adding all the seasonings and ingredients while mixing.

Fourth.—Stuff tightly into beef round casings, in about one-pound rings. Tie the ends together, with a loop of twine between the two ends for hanging purposes.

Fifth.—Smoke them for 24 to 36 hours in a slow cold smoke. Allow them to cool and set; they will then be ready for sale. This sausage is eaten raw, like dried summer sausage.

Dried Kosher Mettwurst

This may be made of the same mixture. Stuff into beef middles or weasands and twine them the same as twined salami sausage. Smoke them in cold smoke for about 24 to 36 hours; then put them into a dry room to dry at a temperature of 48 to 56 degrees F.

Kosher Salami

80 pounds boneless chucks (Freeze-Em-Pickle cured),
20 pounds brisket fat (Freeze-Em-Pickle cured),
1 pound Zanzibar-Brand Summer Sausage Seasoning,
¼ to ½ pound "B" Condimentine,
2 ounces Zanzibar-Brand Garlic Compound,
½ pound granulated sugar.

First.—Run the beef chucks through the ¼-inch-hole plate of the meat grinder.

Second.—Cut the brisket fat by hand or on a fat cutter, or anything which will cut it into ¼-inch cubes.

Third.—When all of the meat is prepared, mix it in a power mixer, or if there is no power mixer, it can be mixed by hand. While mixing, add the seasonings, Zanzibar-Brand Garlic Compound, etc. Mix well, but do not add water.

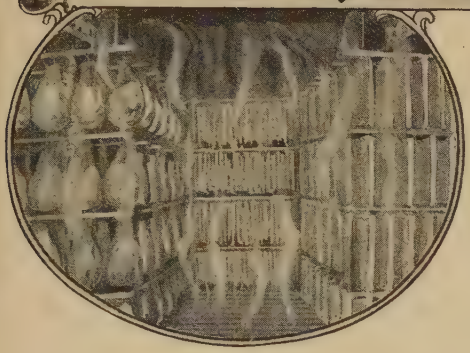
Fourth.—When mixed spread the meat 6 to 8 inches thick on boards or pans and put these in a refrigerator or cooler at a temperature of about 40 degrees F. Allow it to remain 48 hours.

Fifth.—Remove the meat from the cooler and mix it again. Then stuff into wide beef middles or weasands not less than two inches in diameter and eighteen inches long.

Sixth.—Smoke in a hot smoke so as to fully cook the meat. When sufficiently smoked they should be cooked through to the center.

These sausages can be sold in different conditions, such as fresh, medium dry, and extra dry. The prices are made accordingly.

Smoking



Meats, sausages and fish are smoked to preserve them and to give them the pleasing flavor and fragrance of burning hardwood and an appetizing color.

To obtain by smoke alone the colors the consumer demands is almost hopeless. Besides, it would often cause such excessive shrinkage that the sausage would be unsightly and would have to be sold at a prohibitive price to yield a profit. The federal government recognizes this and permits the use of harmless casing colors to supplement the smoking. We recommend our

Zanzibar-Carbon-Brand Casing Brown Mixture (powder), for bologna, frankfurts, minced ham, etc.;
Zanzibar-Carbon-Brand Casing Yellow Mixture (powder), for liver sausage;
Malaboza Pure-Food Vegetable Casing Color (liquid);
Malaboza Pure-Food Vegetable Fish Color (liquid).

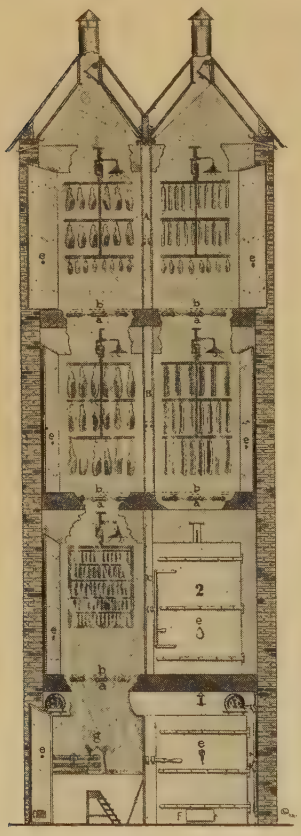
Modern Packing-House Smokehouses

In the large packing house, the smokehouses are indoors, the walls at least 13 inches (1½ brick lengths) thick. This retains heat more uniformly and economically and promotes efficiency in the more convenient handling of the meats and meat products.

The smokehouses extend, like large chimneys, through several floors, with doors and hanging space at each level. A fire pit extending some five feet below the lower floor level, produces the heat and smoke to treat, at one operation, all that is hung on the several floor levels above. A heavy woven wire screen at each floor level serves to prevent accidents. This plan lends itself admirably to smoking, in one operation, goods which require different degrees of heat: the higher the product is hung above the fire or source of heat, the cooler the smoking, provided the smokehouse is properly ventilated.

The meats are not hung directly in these, except in the case of "revolving" smokehouses, but in steel "cages" or on ham "trees" which are suspended from overhead rails running from the work benches and cooking tanks into the smokehouses. Goods which are

cooked are lowered, cage and all, from such rails into cooking vats, or into steam chambers, where they remain submerged or inclosed till properly cooked.



SMOKEHOUSE IN A PACKING HOUSE

The area of the separate houses is not alike. Those intended for sausage usually have the width of one cage. The quantity of sausage smoked at one time is then limited to a single row of cages suspended from one rail which runs lengthwise through the smokehouse. The smokehouse units for hams, bacon and picnics, are usually larger, in exact multiples of the area occupied by a ham tree. Thus there are several rows of trees in a smokehouse with an overhead rail for each row.

There are few openings, usually only one door on each floor level, and that is wide enough to admit the largest cage used. There is a door at the fire box and there are flues and ventilators at the roofs, all provided with dampers to regulate the flow of air and smoke.

No wood is used in the construction. Sheet metal for doors, flues and roofs, and "I" beams for the rails, provide reasonable fire protection. The only things in the modern smokehouse which may catch fire are the sausage sticks, the products that are being smoked, and the fuel.

All parts are cleaned, from time to time. We recommend our Ozo Washing Powder for this purpose. Soot must be brushed down to prevent fire.

Circular smokehouses have been tried in some sections. Meats and sausages are removed from trucks and cages and hung on a single revolving tree which is pivoted in the center of the smokehouses. It is true that the smoke and heat can be as evenly distributed in such houses without difficulty as in a bread baking oven; but modern houses and modern equipment leave nothing to be wished for in this respect either. The fact remains that the square smokehouse is more efficient in the use of both space and labor.

Permanent Outdoor Smokehouse

A good, permanent, outdoor smokehouse should have a fireproof construction, walls at least 13 inches (1½ brick lengths) thick, a ventilated roof with corresponding port holes in the bottom (in the door usually), close-fitting door to keep out insects, vermin and household animals, and all openings protected with fine-mesh screens. It should be built of brick, stone or hollow tile and the walls should be smooth for easy cleaning.

The roof should be double, with an air space between, to shield the smokehouse from extremes of heat and cold and to prevent drip from above in cold weather. The flue should come out at the middle, with valve in it which can be controlled from below. The under side of the roof should be smooth and slope upward from all sides to the flue.

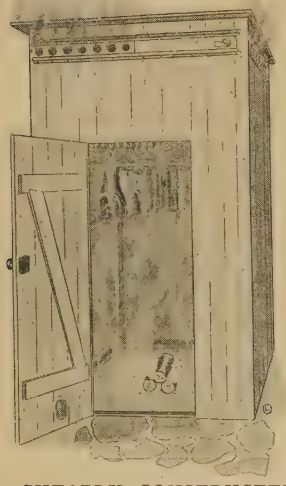
Steam coils, extending around all sides near the bottom, are almost a necessity to help maintain a steady heat in winter and to produce dry, hot air at any time.

Electric lights, with switch at the door, should be provided in the smokehouse, wherever possible, that the man in charge of smoking may see to work and see how the products are progressing. With ample electric lights, no windows are necessary.

When cages and ham trees with overhead rails are not used, the smokehouse must be provided with racks, the horizontal rails (from center to center) as far apart as the length of the smoke sticks used. These beams may be of 4-inch by 6-inch timber, but steel "I" beams are better. A house 10 feet high would have the top of such rails at the 7-foot level and at 9 feet. Products requiring more heat are then hung at the lower level, for the higher level receives a cooler smoke or cooler air, unless there is no top ventilation or a dead air pocket is formed as a result of defective ventilation. Those hanging at the higher level get a denser smoke. If there is an outside fireplace, a third hanging rail may be provided at the 5-foot level.

Wooden Smokehouse

As ordinarily made, the smokehouse built of lumber is unsafe and inefficient. If a wooden house must be used, a degree of safety can be provided by keeping the fire in a metal pot or kettle (an air vent in its bottom) placed in the center of the house; but it is better to dig a fire pit three yards from the smokehouse, piping the smoke,



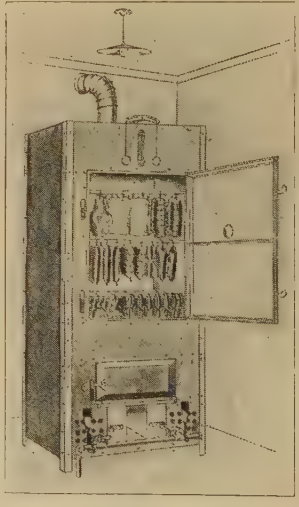
CHEAPLY CONSTRUCTED WOODEN SMOKEHOUSE

either underground or along the surface, into the middle of the smokehouse. Unless the smokehouse is at least 8 feet high, from floor to the top of the upper hanging rails, it should never have the fire made inside. It is impossible to regulate either smoke or temperature when ventilating depends entirely on cracks between boards or perhaps a hole at the top. The house must be tight everywhere except for the ventilator in the top and draft port at the bottom, both of which must be capable of regulation.

Portable Indoor Smokehouses

In every branch of the meat industry there are times and circumstances when a portable smokehouse would be a convenience. Made of sheet metal, they are advertised in various sizes, ranging from small cabinets to vault-like arrangements with overhead rail.

No reason is apparent why such "smokehouse" should not give as good results as any, either as a makeshift or as a part of the permanent equipment. The fundamental necessities for proper smoking are made clear enough in this chapter on smoking, and the observant reader should be equipped to draw his own conclusions from whatever illustrations and descriptions are offered.



AN EFFICIENT PORTABLE SMOKEHOUSE

Cheap Temporary Smokehouses

The following illustrations show some simple methods of rigging up a temporary smokehouse. Variations from the ideas conveyed by these illustrations can be made to suit the one using them.

Butchers are often compelled to re-smoke bologna received from the packer. Sometimes hams and bacon need to be re-smoked. Occasionally it is desired to smoke a small quantity of cured meat. The illustrations show how this can be done where the butcher is not equipped with a smokehouse.

The meat to be smoked should hang from rods or sticks. Tie strings to meat and have the strings long enough to drop the meat to about the center of the barrel.

Figure 1. This illustrates a good method which is to take a clean sugar barrel and knock out the bottom. Then set the barrel on top of a box about four feet long, one or two feet high, and wide enough to permit the barrel to be placed upon it. Any sort of box will do that is large enough for the purpose.

Bore large auger holes through the box, or cut out a piece about

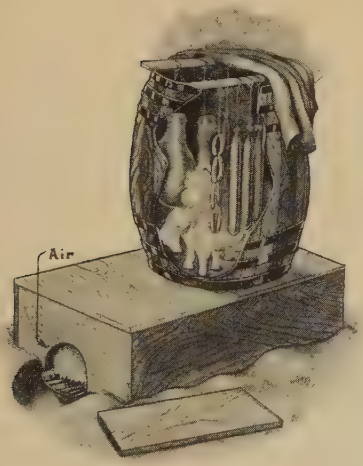


FIGURE 1

FIGURE 2

one foot square under the barrel, to permit the smoke to circulate around the meat hanging above. Procure a large piece of tin, galvanized iron, or sheet iron, about one foot wide and two feet long and bend it into the shape of a pan. Or, if desired, use an old roasting pan. Cut a hole in the front end of the box so that fire can be placed upon the piece of tin, sheet iron, or pan, whichever is used, and pushed underneath the box. After the fire has been placed under the box, close up the front air hole with a board. Bank up all around the box with earth to confine the smoke to the single outlet around the meat being smoked.

This method of smoking meat, when properly used according to our directions, will give satisfactory results. Any butcher can readily rig up a temporary smokehouse, as above suggested, with a minimum of labor and expense.

Figure 2. Another good way of smoking meats is to dig a sufficiently large hole in the earth to permit the building of a good size fire under the barrel, as shown in the illustration. Over this hole, place boards with an opening in them for the smoke to pass up into the barrel. Over the hole in the boards place a barrel, with the bottom knocked out of it. Build a fire and, after the wood used for making the fire is well charred, cover the burning wood with a quantity of sawdust, or corn cobs, so that the necessary smoke is produced and so that it will smolder slowly. Then cover the fire with the boards. Hang in the meat or sausage to be smoked. Cover the barrel, leaving a small opening to cause a draft to draw up the smoke. The opening for air should be sufficient to keep fire going.

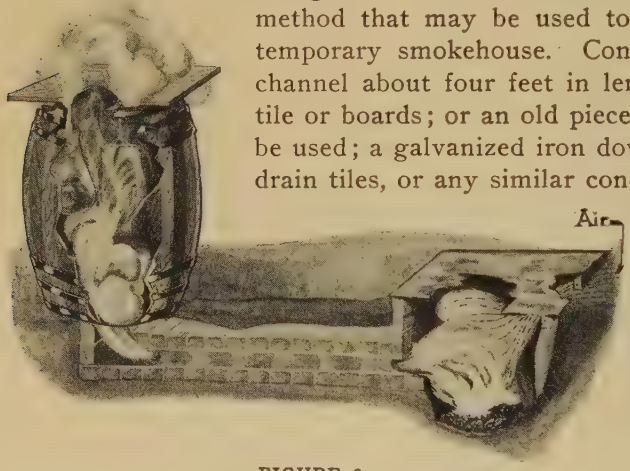


FIGURE 3

Figure 3. This illustration shows another method that may be used to smoke meat in a temporary smokehouse. Construct a gutter or channel about four feet in length out of bricks, tile or boards; or an old piece of stove-pipe may be used; a galvanized iron down spout, ordinary drain tiles, or any similar conductor will answer the purpose. At one end of this trench place a barrel containing the meat to be smoked. At other end arrange for a fire after the manner shown in the illustration.

Smokehouse Fuel

The fuel may be wood, coke, corn cobs, or gas and sawdust or planing mill shavings. The advantage one wood may have over another is in the flavor it produces and in the fact that a smoldering fire is more easily controlled with hard, green wood than with soft or seasoned wood, and more easily with sawdust or planing mill shavings than with cordwood or sticks. But to keep a fire going over long periods without attention, a large hardwood knot is best. Arranged according to their hardness, the order of preference for the more common woods is approximately as follows, with clean corn cobs included.

1. Hickory,
2. Beech,
3. Oak,
4. Ash,
5. Apple orchard prunings,
6. Hard maple,
7. Birch,
8. Elm,
9. Basswood,
10. Peach orchard prunings,
11. Willow,
12. Soft maple,
13. Poplar or cottonwood,
14. Clean corn cobs,
15. Cedar,
16. Cypress,
17. Tulip tree.

For flavor, maple and hickory hold first place. A distinctive flavor can be given to meats by smoking with any of the above and finishing with juniper or sassafras; or, better still, by throwing twigs or bark of these on the fire, from time to time, throughout the smoking.

Pine, fir and other resinous, pitchy or turpentine trees, cannot be used as they injure the flavor. The same is true of walnut and other woods which produce an offensive odor in burning. Even cedar, cypress and tulip tree should be avoided if anything better is available.

Green wood burns more slowly and is therefore more easily controlled than seasoned wood; but it makes little more actual smoke than an equivalent burning of dry wood. The greater proportion of moisture driven off as vapor only makes it seem to smoke more. Such vapor will affect the color of the product more or less: dry heat produces the best color, but seasoned wood gives more trouble in controlling the fire.

Gas, up to $1.50 and even $1.75 per 1,000 cubic feet, can be used profitably. This is equivalent to about $7.00 or $7.50 per cord for hickory wood. At relatively even cost, gas would still have the advantage of being quickly lighted, giving an even heat and being quickly turned off. It is more convenient, reduces labor, fits in anywhere, and is easily regulated for the different needs of different products. A gas fire makes it easy to reduce shrinkage, increase production, and turn out a uniform product. In giving a steady heat, it may even be regulated automatically with a thermostat. But sawdust must be used with gas to create the necessary smoke.

Smokehouse Operation

SMOKING SWEET-PICKLE MEATS

Any cured meat—fish, flesh or fowl—is improved by smoking. But shrinkage in smoking is such that, as a rule, only those meat cuts which have gained in the pickle cure are smoked. All sweet-pickle cuts are smoked unless otherwise needed; some are boiled, and others both boiled and smoked. Meat put into smoke before it is thoroughly cured, will puff up and become sour or decomposed, or it will show

gray-green discoloration in the interior, with better color toward the surface. Follow the methods for curing meats faithfully as directed for the Freeze-Em-Pickle process and there will be no losses from improper curing.

All cured meats are soaked before smoking. This is to remove excess salt from near the surface and to produce a better color on the outside of the meat.

A safe rule for all hams, shoulders and bellies is to soak in cold water, 5 minutes for each day in cure. When meat is soaked too long or at too high a temperature it becomes "water logged" and such meat may turn sour as a result of smoking. A change of water is advised rather than longer soaking where this rule does not remove all the surplus salt.

After soaking, quickly wash the meats with hot water at about 110 degrees F., using a rice-root brush to remove slime and loose fat, and scrape the skin with a bell scraper to clean the pores. Do not leave the meats in the hot water longer than necessary for the actual scrubbing. If branding is done, this is the time for it—when the skin is bright, clean and practically dry. Clean the soaking vats after each day's run.

In hanging the meats in the cages on sticks or trees, be careful to hang the individual pieces in such manner as to prevent their touching one another or the walls. Hang bellies on hangers, the flank end up, allowing for shrinkage by slightly pressing the edges together while impaling the bellies on hangers. Trim off ragged parts of all meats before hanging and smoking. Hang small meats or those requiring less smoke nearest the door, for convenience in taking them out first.

Let the meat drip and dry off as much as possible before starting the fire. Time can be saved by drying the meat before smoking by blowing with compressed air, or even by the use of one or more electric fans, depending on the extent of the operations.

When dry, start the fire and raise the temperature to between 130 and 135 degrees F. Continue at this temperature until the surface of the meat is thoroughly dry, which will take several hours, depending upon the size of smokehouse. This tends to "crisp" the surface so as to prevent loss from dripping.

Where wood or corn cobs are used, raise the temperature with these and do not close the ventilators or add sawdust until the meat is dry on the surface.

Where gas is used and dark color is desired, start the gas and sawdust burning as soon as finished hanging the house. Where light color is desired, dry the surface of the meat with the gas alone and add the sawdust when the meat is dry.

After the drying period, it is necessary to keep a heavy smudge sawdust fire in all houses, regardless of whether wood-fired or gas-fired. With outdoor houses, the volume of smoke issuing from the ventilators is the best indicator of conditions inside. Experience will soon teach the observing how dense the smoke should be to produce any desired results. One method of making the smudge is to divide the fire so as to form a ring around the heap of unburned sawdust. Do not throw the sawdust on the flame, as this sends up a cloud of ashes and soils the meat instead of smoking it.

As soon as the meats are dry, gradually reduce the temperature to between 110 and 115 degrees F., finishing within that range.

As soon as the contents of a smokehouse are finished, open wide all dampers, doors and ventilators. This avoids unnecessary shrinkage in the heated smokehouse while the contents are being removed. Pull out the smoked meats promptly and let them dry and cool off at room temperature without noticeable draft. Wipe with dry, clean cheesecloth. Do not wrap the smoked meats before their temperature to the center has been reduced to ordinary room temperature.

Do not wrap them before time of delivery and ship as soon as possible after smoking.

SMOKING DRY SALT MEATS

All domestic dry-salt cuts and sometimes English shoulders are smoked after curing, unless otherwise needed.

Soak and wash the meats before smoking, as directed for pickle-cured meats; but keep them separate. They must not be soaked longer on account of the greater salt content; but the water may be changed two or three times, in order to extract the salt.

When there is enough dry-salt cured meat to fill the house, it should be smoked separately and not with sweet-pickle meats. Carry a temperature of 105 to 110 degrees F., with a heavy smudge of sawdust smoke. Aside from the matter of temperature, the smoking of dry-salt cured meats is like that of sweet-pickle cured meats.

As soon as the surface of the meats is well dried and of proper color, throw open all doors, dampers and ventilators, and take the

meats out of the smokehouse. Their treatment after smoking is identical with that of pickle cured meats.

SMOKING BEEF HAMS OR DRIED BEEF

The smoking of beef is largely a drying process in which a temperature of 125 degrees is maintained for a period sometimes of six days, and in very large smokehouses full of meat it may even take longer. After the meat has sufficient smoke the smoke is discontinued and the balance of time is simply a drying process. This is a difficult undertaking with wood and, for that reason as well as for greater economy, it would ordinarily be advisable to provide steam coils in the smokehouse if much beef drying is done. If steam coils are not available the smokehouse can be kept hot with gas or by burning charcoal or coke in a salamander, such as builders use in winter to dry plaster. To shorten the time needed for drying, drain thoroughly after soaking.

Soak in cold water, allowing 10 minutes for each day the beef has been in cure. Do not soak longer, but change the water as often as necessary to remove all excess salt within that time. Then drain.

Smoke only the first day: then dry according to the demands of the trade and the length of time the meat is to keep. If a very dark mahogany color is desired, a lighter smoke may be carried through the entire drying process.

At no time should the temperature of the smokehouse be allowed to drop after it has been heated up, as this will cause a crust to form on the surface and it will then be impossible to dry the center of the meat. Such meat is known as "shell dried."

SMOKING SAUSAGE

Directions for smoking of each kind of sausage will be found in connection with the formula for that sausage.

MEAT LOAVES, MEAT PUDDINGS MOMSIES, PATTIES, TIMBALES, ETC.

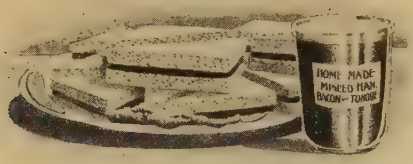
In order to make high grade sausage and meat loaves, the sausage maker and manufacturer of delicatessen food products must use reliable seasonings. It pays to use the very best that can be obtained. Our Zanzibar - Brand Sausage and Meat Loaf Seasonings will give a flavor entirely different from other flavors ordinarily used. They are guaranteed to be carefully tested and selected and free of adulteration.

Manufacturers of meat products will readily learn the exact amount of salt and the kind of seasonings to use in the particular locality the product is to be sold in. In a German neighborhood use German Sausage Seasoning and so in other communities. When using a binder, such as Bull-Meat-Brand Flour, it is necessary to know that the more flour put in, the more salt and seasoning will be required.

In making any of the meat loaves, if one has fresh, clean pork or beef cracklings, 10 to 15 per cent can be used to good advantage. They give a fine flavor to any meat food product to which they are added. First, break them up as much as possible, then run them through the finest plate of a meat grinder several times, and mix with the meat.

Attract attention to your products by presenting samples to your customers, such as the most critical will be pleased with. Meat loaves, luncheon delicacies, meat pies, sausage, and delicatessen food products should always show taste and skill in their make-up, and be attractive to the eye. Bull-Meat-Brand Flour and Zanzibar-Brand Sausage Seasonings will produce such results if the formulas of B. Heller & Co. are adhered to. Don't try anything else as a substitute. Follow our directions. They have been tested and we know what they will do.

Deviled Ham or Potted Ham, Bacon and Tongue



First.—Take smoked ham ends and shanks, end pieces of bacon and bacon rinds, shanks and ends of smoked shoulders, and boil them as slowly as possible in just enough water to cover them. Boil until the meat is tender and the rind is cooked through.

Second.—About half hour before the meat is done, put in any trimmings or ends of boiled hams and the gullet ends of tongue which may be on hand. They are hard to sell otherwise.

Third.—When the meat is cooked, strip it from the bones and run it and the skins twice through the finest plate of a meat grinder.

Sweet pickles, ground up with the meat, give it a very desirable flavor.

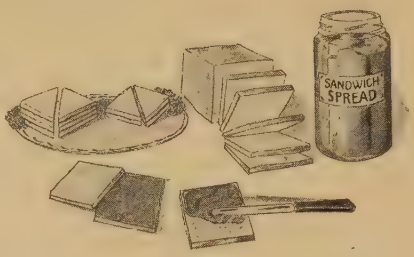
Fourth.—Add enough of the water the meat was cooked in to make the original weight of the meat before it was cooked. When mixing in the water, also mix in a small quantity of whole mustard seed and a little ground pepper.

Fifth.—Pack into jelly glasses putting about 7 ounces of the chopped meat in an 8-ounce glass. Over the top pour hot paraffin to form a layer ¼ inch thick. When the paraffin has cooled, the deviled ham, or potted ham, bacon and tongue is ready for sale.

The product put up in this way can be kept in an ice box for weeks in perfect condition, retaining its original freshness and flavor.

This will be found a very ready seller. It has an exceptionally fine flavor and is a delicious article to eat. It makes excellent sandwiches and, because of the ease with which it spreads and the surface it can be made to cover, is a very economical product. It is retailed at 30c per glass, which virtually gives the butcher 60c a pound for odds and ends he would otherwise throw away or sell at a very low price.

Sandwich Spread



The hocks and shanks of boiled hams and shoulders, unsold sausage ends, and Freeze-Em-Pickle cured lean pork trimmings, cooked, can be made into an excellent sandwich spread for restaurants and road-side stands and for household use.

To every pound of the cooked meat, add

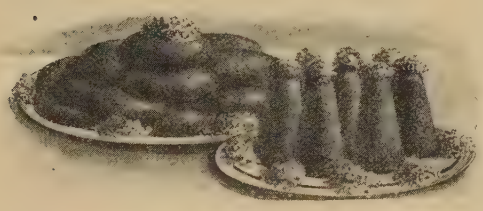
3 green peppers,
3 large sweet cucumber pickles,
1 large bunch of celery,
6 to 8 oz. ordinary salad dressing.

Grind the meat, peppers, pickles and celery together, add the salad dressing and mix thoroughly. It is then ready for sale, either in bulk or put up in small covered jars.

While it will keep a few days in a moderate climate, it may be desirable in some cases to add 1/10 of 1 per cent Zanzibar-Brand Special Preservative. However, the container must then be labeled, "Contains one-tenth of one per cent benzoate of soda."

If the Special Preservative is used, stir it into the salad dressing, add the dressing to the rest and mix thoroughly.

Breakfast Cereal, Pork and Beef Cakes



20 lbs. fresh fat beef trimmings,
30 lbs. fresh fat pork trimmings,
5 lbs. Bull-Meat-Brand Flour,
2 to 4 oz. "A" Condimentine,
12 oz. salt,
8 oz. Dixie Special Pork Sausage Seasoning,
½ lb. sugar,
4 quarts water.
Total 65 pounds.

First.—Run the beef and pork through ⅛-inch-hole plate of the meat grinder.

Second.—Mix all the ingredients together well except the flour and water.

Third.—Then add the flour to the meat and mix well.

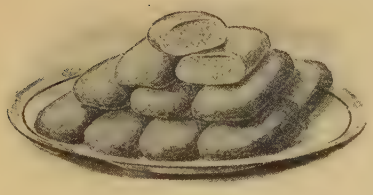
Fourth.—Then, little by little, add the water and mix it into the meat. Always add the water last.

Fifth.—Mold into round cakes or croquettes of about 2 ounces each and dust them with Bull-Meat-Brand Flour. Place them on a platter, decorate with sprigs of parsley, and sprinkle the tops with a little Zanzibar-Brand Chile Powder. Place them on the counter for show, 8 cakes to the pound.

If the meat is very lean some fat should be added, as they can stand considerable. Where a more pronounced pork flavor is desired the proportion of beef used can be reduced. When made in this way a little more Bull-Meat-Brand Flour should be added.

Breakfast cereal, pork and beef cakes are a very popular breakfast dish. They are easily prepared, and the Zanzibar-Brand Pork Sausage Seasoning with Sage gives them an exceptionally fine, appetizing flavor. The proportion of seasoning to use varies in different localities, some preferring highly seasoned foods while others require very little. The butcher will, therefore, have to be governed by the taste of individual customers. As a rule the quantity given in the formula will be found very satisfactory to the majority of people, and we would suggest that the formula be followed carefully in order to insure the best results.

Sausage Rolls



12 lbs. wheat flour,
2 lbs. Bull-Meat-Brand Flour,
3 lbs. lard,
1 oz. salt,
7 oz. Heller's Fancy Pastry Baking Powder,
Water sufficient to make a stiff dough.

First.—Mix the salt, baking powder, Bull-Meat-Brand Flour and wheat flour together; then put through a sieve twice.

Second.—Melt the lard and mix thoroughly with the flours, salt and baking powder.

Third.—Add sufficient water to make a stiff dough, like ordinary pie dough.

Fourth.—Divide the dough into 3-ounce portions and roll out into ovals, 7 inches long, 4 inches wide and 3/16 inch thick.

Fifth.—Shape 3 ounces of regular pork sausage meat to have the appearance of a link of fresh pork sausage. Place the sausage meat lengthwise on the dough and moisten the edges of the dough with

water. Fold over the sides to overlap, making the sausage meat compact within: then turn the ends over in the same manner. Turn the sausage roll over with the smooth side up and the folds on the bottom.

Sixth.—Brush a beaten egg over the top of each sausage roll and bake in a hot oven for 25 minutes. They may be warmed in an oven and served hot or eaten cold.

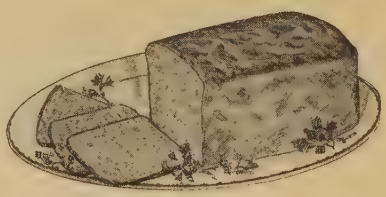
When making these in large quantities the dough should be rolled out in large sheets and the ovals cut out with a knife or die.

Heller's Fancy Pastry Baking Powder is so compounded that only a part of its gas is liberated by moisture and the remainder by the heat of the oven while the dough is being baked. Thus the liberation of gas is gradual, uniform, and practically complete, instead of sudden, violent, and varying in action like many baking powders. This insures a better texture, lightness and moisture in the dough. In making meat pies and loaves this kind of baking powder is very desirable. The double liberation feature of this powder is also a great convenience, as it permits setting the dough aside for several hours, if necessary, before placing it in the oven and yet secure a satisfactory raising. Heller's Fancy Pastry Baking Powder is pure and complies with the national pure food law.

Pennsylvania Scrapple

(Pannhas)

75 lbs. cooked hog head meat, Freeze-Em-Pickle cured,
10 lbs. hog skins, Freeze-Em-Pickle cured,
15 lbs. hog livers,
10 lbs. Bull-Meat-Brand Flour,
¼ to ½ lb. "A" Condimentine,
5 lbs. onions,
1 lb. Zanzibar-Brand Scrapple Seasoning,
1 lb. salt,



3 gals. water in which the meats were cooked.
Total 135 pounds.

First.—Boil the hog heads and hog skins in a steam jacketed kettle or in a kettle over a fire until they are cooked through. Use just enough water to cover them. When cooked through, remove them from the fire and let them cool.

Second.—When cool remove the meat from the bones and put it, together with the onions, through the 5/64-inch-hole plate of a meat grinder.

Third.—Cut the livers in two or three pieces and scald them until they are scalded through to the center. Then throw them into cold water: when cold put them through the finest plate of a grinder two or three times, so as to cut them as finely as possible.

Fourth.—Mix the Bull-Meat-Brand Flour with 3 gallons of the soup the meat was cooked in. Mix in carefully, stirring constantly to prevent the flour from becoming lumpy. Then add the Condimentine, salt, onions and seasoning, and boil 20 minutes until it becomes a thick mush. If too thick a little more soup may be added and if too thin more flour. A paddle will just stand erect in it when the consistency is right.

Fifth.—Grease the pans well with lard and fill them with the scrapple mixture; allow it to cool for two hours, and then place it in the ice box over night. The next day it will be ready for slicing. This loaf is not baked, as it is always fried when served.

NOTE.—The kettle in which the scrapple is made should be a cast-iron steam jacket kettle, with a scraper that scrapes close to the kettle and keeps the scrapple from sticking. If one has no kettle with an agitator in it, he should keep stirring the contents with a paddle by hand. The mixture must be constantly stirred after the flour has been added.

German Scrapple

30 lbs. cooked hog head meat,
10 lbs. Bull-Meat-Brand Flour,
3 lbs. onions,
6 oz. Zanzibar-Brand Scrapple Seasoning,
8 oz. salt,
2 to 3 oz. "A" Condimentine,
Water in which the meat was cooked, sufficient to make a thick mush.

First.—Cut hog heads into four pieces and remove the brains, ears, skin, snout, and eyes. Cut off the fattest part for lard.

Second.—Put the lean and bony parts into cold water to soak over night in order to extract the blood and to cleanse them.

Third.—When the heads have been thoroughly cleaned, put them over a fire to boil, using water enough to cover them entirely. Boil until the meat separates readily from the bones.

Fourth.—Remove from the fire and drain off the liquid, saving it for future use.

Fifth.—Remove all the meat from the bones and chop it and the onions very fine, or run both through the finest plate of a meat grinder.

Sixth.—Add the salt, Condimentine and Scrapple Sausage Seasoning to the meat and mix thoroughly: then add the liquid in which the meat was cooked.

Seventh.—Place on the fire, and while boiling, stir in the Bull-Meat-Brand Flour. Stir constantly and boil hard for 15 minutes: then boil slowly for an hour longer. When done it should be as thick as heavy mush: the paddle should just stand erect in it.

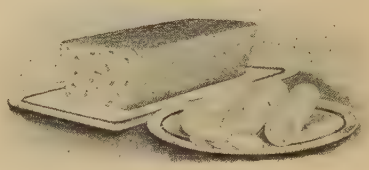
Eighth.—Pour into pans to mold. When cold, slice thin. It is then ready to fry.

Every enterprising butcher should make scrapple and make it with Bull-Meat-Brand Flour. It is economical to produce, delicious eating, and a good, profitable seller that ought to build a nice trade in this product alone.

Cracklings when made of clean hog or beef fat can be ground fine and worked into scrapple to good advantage. They give it a delicious flavor that nothing else will produce.

Scrapple Loaf

10 lbs. cured hog snouts or hog head meat,
10 lbs. cured hog cheek meat,
5 lbs. hog skins,
5 lbs. hog livers,
3 lbs. Bull-Meat-Brand Flour,
2 to 3 oz. "A" Condimentine,
¼ lb. "A" Condimentine,
¼ lb. salt,
2 lbs. finely chopped onions,
6 oz. Zanzibar-Brand Scrapple Seasoning,



4 qts. water in which the meats were cooked.
Total 42 pounds.

First.—Boil the head meat, cheek meat and hog skins in a steam jacketed kettle or in a kettle over a fire until they are cooked through. Use just enough water to cover them.

Second.—When cooked through remove from fire and let cool.

Third.—When cool run the head meat and cheek meat through the ½-inch-hole plate of a meat grinder. Run the cooked skins through the finest plate.

Fourth.—Cut the livers into two or three pieces and scald them

through to the center. Then throw them into cold water and when cold run them through the finest plate of a meat grinder two or three times so as to cut them as fine as possible.

Fifth.—Mix the Bull-Meat-Brand Flour with sufficient cold water to make a smooth paste and gradually add it to 4 quarts of the water the meats were cooked in, stirring constantly to prevent the flour from becoming lumpy. Then add the Condimentine, salt, onions, and seasoning and boil 30 minutes, until it becomes a thick mush. If too thick, a little water may be added; and if too thin, a little more flour.

Sixth.—When the flour is thoroughly cooked into a thick mush, add the ground meats, skins and livers, and mix thoroughly. Then it is ready to put into pans.

Seventh.—Grease the pans well with lard and fill with the scrapple loaf mixture: allow it to cool for two hours and then place in the ice box over night. The next day it will be ready for slicing.

This loaf is not baked, as it is always fried when eaten.

Braunschweiger Liver Loaf or Mock Paté-De-Foie-Gras Loaf

13 lbs. fresh pork trimmings,
12 lbs. hog or calf livers,
7 lbs. veal stew meats,
3 lbs. lamb, calf or hog caul fat,
5 lbs. smoked cured jowl fat,
5 oz. blanched pistachio nuts,
4 lbs. Bull-Meat-Brand Flour,
2 to 3 oz. "A" Condimentine,
2 lbs. finely chopped onions,
12 oz. salt,
6 oz. sugar,
6 oz. Zanzibar-Brand Braunschweiger Liver Sausage Seasoning,
4 qts. water in which the meat was cooked.
Total 55 pounds.

First.—Run a knife through the thick part of the livers once or twice, according to size: then put them into a kettle or barrel and scald them by pouring boiling water over them. Keep adding hot water, from time to time, and stir it well to get it all around them. Leave them in this until they are scalded through to center. Then let cold water run over them until cooled through.

Second.—Put the veal and pork trimmings into a steam jacketed kettle, or into a kettle over a fire, with sufficient water to cover them, and cook until cooked through.

Third.—Run all the cooked meat, livers and fat through the finest

hole plate of a meat grinder several times until they are fine enough: the finer the better.

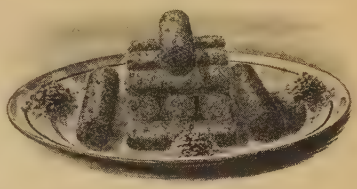
Fourth.—Place meat in mixer or mix by hand. Add the flour and seasoning to the finely ground meat. Blanch the pistachio nuts and add them to the other ingredients, mixing well. Then mix in 4 quarts of the water the meat was cooked in.

Fifth.—Place in well greased pans, holding about 6 pounds each, and bake slowly for 2½ to 3 hours.

Sixth.—Remove from the oven, allow to cool and then place in the ice box over night. It is then ready for sale.

The above formula is also used for goods to be put up in hermetically sealed glass jars and cans.

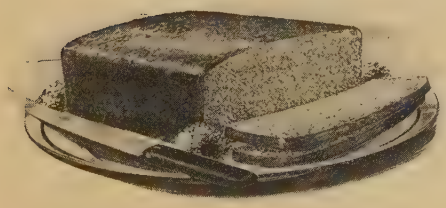
Mock Paté-De-Foie-Gras Timbales



The paté-de-foie-gras loaf mixture, before it is baked, can be made into timbales by making into rolls 3 inches long and ¾ inch thick. Shape and roll them on a dough board, using a liberal quantity of Bull-Meat-Brand Flour so that they are well covered with it. Place them on a platter or dish and decorate with parsley.

Paté-de-foie-gras timbales are a good seller. All the housewife has to do with them is to fry them in a little butter until nicely browned and place them on the table, granished with a few slices of lemon or sprigs of parsley.

Liver Loaf



15 lbs. fresh pork head meat,
10 lbs. hog livers,
8 lbs. hog skins,
7 lbs. fresh beef or pork trimmings, hearts, etc.,
10 lbs. fresh, plain tripe (cooked),
5 lbs. Bull-Meat-Brand Flour,
2 lbs. finely chopped onions,
1 lb. salt,
8 oz. Zanzibar-Brand Braunschweiger Liver Sausage Seasoning,
2 to 4 oz. "A" Condimentine,
1½ gals. water in which the meat was cooked.
Total 70 pounds.

First.—Cook meat, livers and tripe until tender, in just enough water to cover them, in a steam jacketed kettle or in a kettle over a fire. The livers will be done first: when done remove from kettle and place in ice water to cool.

Second.—When the meat and tripe are done, chop very fine or run twice through the 5/64-inch-hole plate of a meat grinder. Also grind the cooled cooked livers in the same way. The finer the meats are cut, the more uniformly the seasonings can be distributed and the better the loaf will be.

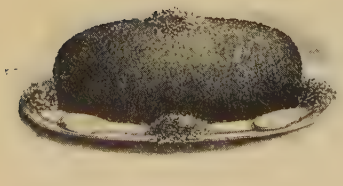
Third.—Place in a mixer or mix by hand, adding the seasonings and flour, and after other ingredients have been thoroughly mixed, add the water the meat was cooked in.

Fourth.—Place in 6-pound oblong, well greased bake pans and bake for 3 hours in a slow oven, gradually raising the temperature to reach 340 degrees F. at the last half hour. Remove from oven and brush the tops with dilute hot sirup to brown them. Allow to cool and place in the ice box over night. Then turn out of the bake pans and it is ready for sale.

Liver loaf is a very inexpensive product and a good seller. By making this loaf the butcher will be able to sell, at a good profit, products he would otherwise sell for almost nothing. Every butcher should make liver loaf. The Zanzibar-Brand Liver Sausage Seasoning gives it an exceptionally fine, appetizing flavor.

"A" Condimentine is guaranteed not to contain any ingredient that has been ruled out by the regulations of the federal meat inspection law. The use of this product is permissible in United States government inspected packing houses. Use it and you will be pleased.

Hamburger Loaf



30 lbs. lean fresh beef trimmings,
2 lbs. fresh onions,
10 lbs. brisket beef trimmings,
6 oz. Zanzibar-Brand Hamburger Seasoning,
4 lbs. Bull-Meat-Brand Flour,
2 to 3 oz. "B" Condimentine,
2 oz. Freeze-Em-Pickle,
¼ oz. Zanzibar-Brand Garlic Compound,
6 oz. salt,
4 qts. water.

Total 55 pounds.

First.—Run the meats through the 3/16-inch plate of a meat grinder.

Second.—Run the onions through the same plate and add to the meat.

Third.—Add all the other ingredients, except the flour and water, to the meat and mix thoroughly.

Fourth.—Add the Bull-Meat-Brand Flour to above and mix.

Fifth.—Add the 4 quarts water and mix until it is all taken up by the meat and flour.

Hamburger loaf can be sold either cooked or uncooked.

If to be Sold Uncooked

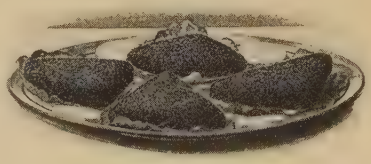
Place it on a platter, decorated with sprigs of parsley, and sell it like hamburger steak, to be made into balls or patties and fried by the housewife.

If to be Sold Cooked

Grease oblong pans holding about 6 pounds each and fill them with hamburger loaf mixture. See that there are no air holes around the sides or bottom of the pan between the meat and the pan. Bake in a medium heated oven for about 3½ to 4 hours, starting at 200 degrees F. and slowly increasing to reach 340 degrees at the last hour. Remove from oven and immediately brush with diluted hot sirup to brown the loaves. Allow to cool and then place in the ice box over night. The next day it is ready for sale.

Hamburger Patties

The hamburger loaf mixture can be made into patties like hamburger steak when it is fried, using a liberal quantity of Bull-Meat Brand Flour to cover them. Place them on a platter or dish and decorate with parsley.



Hamburger patties are a good seller and all the housewife has to do with them is to fry them in a little butter or lard until nicely browned and serve them on a platter garnished with a few slices of lemon and sprigs of parsley.

Hamburger loaf and hamburger patties may be made of beef or, if desired, some pork may be used.

Momsies

The One-Minute Meal

Momsies are patties, cakes, balls or loaves made of meat, fat, crushed ice or ice water, and Momsie-Mix. They may or may not have added onions. The butcher who sells Momsies has no worry about meat curing, casings, stuffing, smoking, and cooking. With a meat grinder, a mixing tub, and Momsie-Mix, he is always prepared to make profitable use of trimmings and slowly moving cuts. The name, "Momsie" or "Momsies", is a trade name we have registered in the United States patent office and in Canada. Any butcher or packer who uses our Momsie-Mix in a food product according to our directions, is thereby licensed to call that product "Momsies". Using it otherwise would make him liable in a suit for infringement.

Formula for Making Bulk Momsie

2 lbs. beef fat (trimmings),
8 lbs. selected lean beef trimmings or slow-moving lean beef cuts,
1 lb. package Momsie-Mix selected from the nine varieties listed on the opposite page,
2½ lbs. crushed ice or ice water.

For Hamburger, Swedish and Hungarian Momsies add also 1 lb. peeled onions.

It is possible to use part pork or even all pork; but the best Momsies are made of all beef.

First weigh out the 2 lbs. of fat and 8 lbs. of lean beef trimmings, and (if required) the 1 lb. of peeled onions.

Cut the fat and beef (and the onions) into small pieces and mix together with the contents of one package of suitable Momsie-Mix. That package **contains everything necessary** except the fat, the beef, and the ice or ice water. No salt, seasoning or binder should be added, as **everything necessary is in the package.**

Cut as fine as possible in the silent cutter or put everything through the finest plate of a meat grinder: the finer ground the better the Momsies will be.

The bulk Momsie is then placed on a tray or platter with special artistic price card which we furnish free with every order, or packed in convenient sealed cartons for sale to the housewife. Bulk Momsie may also be delivered at lunch counters and sandwich stands. Any butcher can build up a profitable delivery route by featuring Momsies as a leader.

How to Make the Momsies

The housewife, the lunch counter, and the sandwich stand make the bulk Momsie into Momsie sandwiches, Momsie cakes, Momsies in ramekins or molds, Momsie rolled in cured or uncured cabbage leaves, Momsie loaf, etc. Recipes for making all of these are on each carton of Momsie-Mix and the butcher can render a helpful service by placing those recipes at the disposal of his customers.

Frying Momsies in deep fat causes them to swell like doughnuts. This enables the sandwich vender to give a much smaller portion, and even then he finds it necessary to squeeze down on it, as hard as possible with a pancake turner, to keep the sandwich down to reasonable thickness. The aroma, flavor and juiciness of such a sandwich is beyond the belief of anybody who has not actually enjoyed the treat.

Momsie-Mix

Momsie-Mix is a product we have originated and perfected for making Momsies. It gives the Momsies the delightful taste, juiciness, and aroma which characterize them as the finest thing for breakfast and quick lunches.

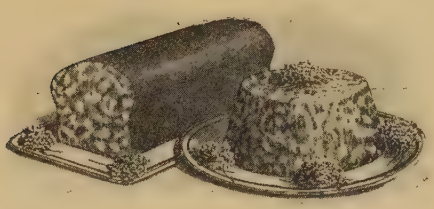
It is put up in nine distinctive flavors each one carefully blended by master hands to represent the finest cooking its name suggests, as follows:

Coney Island Momsie-Mix,
Yankee-Style Momsie-Mix,
Dixie Special Momsie-Mix,
Southern-Style, Extra Hot, Momsie-Mix,
English-Breakfast-Style Momsie-Mix,
Hamburger-Style Momsie-Mix,
Frankfurt-Style Momsie-Mix,
Swedish-Style Momsie-Mix,
Hungarian-Style Momsie-Mix.

Each of these special flavors has on its carton the recipes for making the familiar dishes which appeal especially to the natives of that particular country or section. No matter what a community consists of, there is a Momsie-Mix that will bring back fond memories of the old home and fireside.

While Momsie-Mix enables the butcher to make a better profit out of trimmings and slow-moving cuts, the novelty will attract much new business.

Corned Beef Hash Loaf



30 lbs. Freeze-Em-Pickle dry cured fat beef trimmings, or fat corned beef, or the trimmings from fat corned beef.
20 lbs. boiled potatoes,
5 lbs. fresh onions,
3 lbs. Bull-Meat-Brand Flour,
6 oz. Zanzibar-Brand Frankfurt Sausage Seasoning,
2 to 3 oz. "B" Condimentine,
½ oz. Zanzibar-Brand Garlic Compound,
2 oz. Zanzibar-Brand Chile Powder,
8 oz. sugar,
4 qts. water in which the meat was cooked.
Total 67 pounds.

First.—Boil the cured beef trimmings or corned beef in a steam jacketed kettle, or in a kettle over a fire for 10 or 15 minutes. Draw off the water, add enough fresh water to cover the meat, and cook until the meat is tender.

Second.—Run the cooked meat through the ¼ or ⅜-inch-hole plate of a meat grinder.

Third.—Wash the potatoes and cook them with the skins on until they are cooked through, but not too soft.

Fourth.—Peel the potatoes and cut out all the eyes and any decayed portions. Then cut them into ⅜-inch cubes.

Fifth.—Mix the meat, flour, and all other ingredients except the potatoes: when well mixed, add 4 quarts of the water the meat was cooked in and mix this in well.

Sixth.—Add the potatoes and mix just long enough to get them thoroughly mixed with the other ingredients, but not long enough to mash them.

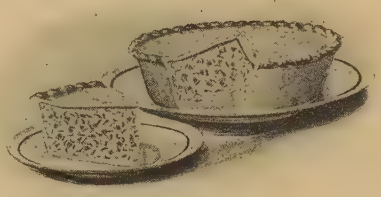
Corned beef hash may be baked in 6-pound oblong pans and sold to be eaten cold like veal loaf, but most people prefer to cook it themselves. If to be sold cooked, bake in a medium heated oven for about 2½ to 3 hours. If to be sold uncooked, display it like bulk pork sausage, on platters.

How to Serve

Fry and serve hot with catsup or tomato sauce: it is very delicious. Corned beef hash made of meat cured with Freeze-Em-Pickle has a very appetizing appearance and exceptionally fine flavor.

Veal and Ham Pies

15 lbs. fresh pork trimmings,
10 lbs. veal stew meat,
5 lbs. smoked shoulder or smoked shoulder butts,
3 lbs. Bull-Meat-Brand Flour,
6 oz. Zanzibar-Brand Pork Sausage Seasoning, without Sage,
½ lb. salt,
2 to 3 oz. "A" Condimentine,
1 lb. Zanzibar-Brand Savory Jell-Jell,
1 gal. boiling water.
Total 44 pounds.



First.—Run the pork and veal through the ½-inch-hole plate of a meat grinder and smoked shoulder through the ¼-inch.

Second.—Mix the flour, seasoning, salt, and "A" Condimentine together: add them to the ground meat and mix well.

Third.—Dissolve the Savory Jell-Jell in sufficient cold water to swell it. Let it soak a few minutes and then add the gallon of boiling water, stirring well until the Jell-Jell is all dissolved.

Fourth.—Pour the dissolved Jell-Jell over the meat slowly and mix well while it is being added.

Dough for Veal and Ham Pies

10 pounds wheat flour,
2 pounds Bull-Meat-Brand Flour,
4 pounds melted lard,
.1 ounce salt,
6 ounces Heller's Fancy-Pastry Baking Powder,
Sufficient cold water to make a stiff dough, about 4½ pints.

First.—Mix the flour, salt, and baking powder together dry.

Second.—Melt the lard and rub it into the dry ingredients.

Third.—Add cold water to make a stiff pie-crust dough.

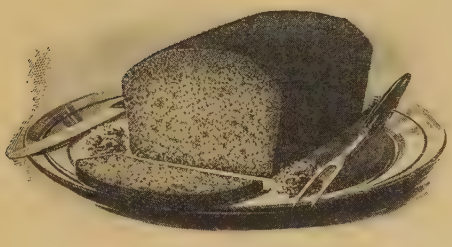
Fourth.—Roll the dough ¼ inch thick and line any kind of pans or molds desired. Grease them before lining.

Fifth.—Fill the pans with the meat mixture, dampen the edges of the crust with water so that the top will stick, and place the cover of dough on the pie. Decorate with leaf or flower designs made of the dough, and be sure the top has a few openings in it to allow the steam to escape. Brush the tops with well beaten eggs.

Sixth.—Bake it in a hot oven, but be careful not to burn it. Bake 1-pound meat pies 45 minutes, larger ones according to size.

If desired, pork, beef or mutton may be used instead of veal and ham.

Veal Loaf



30 lbs. veal stew meat,
10 lbs. fresh pork trimmings,
10 lbs. fresh beef trimmings,
3 lbs. Bull-Meat-Brand Flour,
8 oz. Zanzibar-Brand Frankfurt Sausage Seasoning,
12 oz. salt,
2 to 4 oz. "A" Condimentine,
1 oz. lemon extract,
2 oz. green parsley, chopped fine,
¾ oz. Zanzibar-Brand Garlic Compound,
3 qts. cold water.

Total 60 pounds.

First.—Run the veal, pork, and beef through the finest plate of a meat grinder.

Second.—Mix the seasoning, Garlic Compound, "B" Condimentine, flour, and chopped parsley together, then mix all with the meat.

Third.—Mix the lemon extract with 3 quarts water and gradually add it to the meat and other ingredients while mixing.

Fourth.—Grease 6-pound bread pans with lard and fill them with 6 lbs. 4 oz. of the veal loaf mixture. With a butter paddle, smooth it down tightly in a gentle curve, a little deeper at the middle and next to the tin in both ends. This prevents undue rise and splitting of the loaf.

Fifth.—Bake them about 3 hours, or 'till brown, in an oven heated to 150 degrees F. the first hour, 250 degrees the second and 300 degrees the third hour. Allow to cool and then put into ice box over night. The next day the loaves will be ready for sale.

If it is desired to make veal loaf of all veal, use 50 pounds instead of veal, pork, and beef, as directed above, and make according to same directions.

Home-Made Veal Loaf

50 pounds veal (cheap cuts),
2½ pounds fat salt pork,
3 pounds Bull-Meat-Brand Flour,
2 pounds dry onions,
½ pound Zanzibar-Brand Bologna Sausage Seasoning,
2 to 4 oz. "A" Condimentine,
1 lb. salt.

First.—Cut the veal, pork fat, and onions into suitable pieces for the meat grinder and mix well with the Bull-Meat-Brand Flour, seasoning and Condimentine.

Second.—Run the mixture through the coarse plate of the meat grinder and then through the smallest you have.

Third.—Mix and knead the ground meat, adding what water is necessary while mixing and mix till solid and then pack it into greased, single-loaf bread pans.

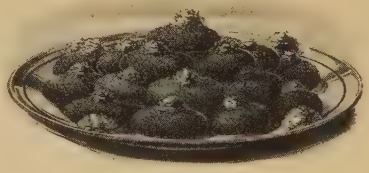
Fourth.—Bake three hours at a temperature of 150 during the first hour, 250 during the second hour, and 300 to 325 during the third. It appeals to the appetite if brushed with sugar water just before removing from the oven and allowed to brown.

Allow it to cool in the pans.

This loaf enables the butcher to use up all cuts of veal that do not sell readily in his locality and to realize a profit on them besides.

Veal Loaf Patties

Take the veal loaf mixture and form it into nice little patties. Roll them in Bull-Meat-Brand Flour and decorate each with a sprig of parsley.



Veal Loaf Timbales

Roll ¾ of an inch thick and cut 3 inches long; roll in Bull-Meat-Brand Flour.

Veal loaf patties and veal loaf timbales are to be fried in butter or lard and eaten hot. Any butcher who will make these will soon work up a very nice trade on them.

Ham Salad

To 20 pounds of the meat from (smoked) ham hocks and other end pieces of smoked pork cuts after they have been cooked and stripped from the bone, add

4 dozen sweet pickles,
3 ounces Zanzibar-Brand Minced Ham Seasoning,
2 ounces "B" Condimentine.

Cook the meat in water held at 160 degrees F. for two hours, then bone and trim the meats.

After cooking remove most of the fat from the meat, add (to 20 pounds of this meat) the sweet cucumber pickles, seasoning and Condimentine, and run the whole through the finest hole plate of the meat grinder. Pack into 6-pound meat-loaf tins or into single-loaf bread pans.

Place in cooler till chilled through. The loaves may then be turned out of the tins and will slice nicely, ready for sale.

Ham Loaf

15 pounds lean pork trimmings, Freeze-Em-Pickle cured,
15 pounds pork cheek meat, Freeze-Em-Pickle cured,
15 pounds boned bull meat or chucks or lean beef trimmings, Freeze-Em-Pickle cured,
5 pounds fresh, regular pork trimmings, thoroughly chilled, or firm pork back fat,
5 pounds Bull-Meat-Brand Flour,
½ pound granulated sugar,
½ pound Zanzibar-Brand Frankfurt Sausage Seasoning,
2 to 4 ounces "B" Condimentine,
1 ounce ground nutmeg,
½ to 1 pound peeled, raw onions,
Salt, to taste.

Pick the sinews from the beef. Run the beef and pork, except the fresh pork trimmings, through the lard plate (that is, the 1-inch-hole plate) of the meat grinder, and then cure them separately by the Freeze-Em-Pickle process.

First.—Grind the meats separately through the ⅛-inch-hole plate of the meat grinder, then put the beef and the pork cheek meat into the silent cutter and let it run about three minutes while adding all the other ingredients, except the lean pork trimmings and the fresh regular pork trimmings, or pork back fat: add those after the silent cutter has made a few turns and let it run about two minutes longer.

If one has no silent cutter the beef and the pork cheek meat should be run first through the ⅛-inch-hole plate of the meat grinder and then through the 5/64-inch, or the smallest plate you have. The pork trimmings may be simply run through the ⅛-inch plate after first adding the "B" Condimentine. When all meats are ground, mix in all the other ingredients in a power mixer by hand in a tub.

Second.—Knead the batch well to work out all air pockets. Grease the insides of 6-pound baking tins and fill them with the mixture.

Third.—The customary method is to bake these tins in a rotary oven for three hours, at a temperature of 150 degrees F. the first hour, 250 degrees the second hour, and 300 the third.

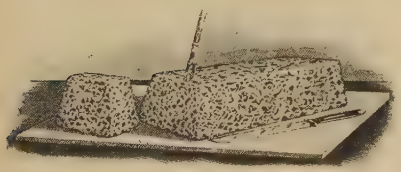
To prevent the entire melting of fat and to reduce shrinkage to a minimum, the following may be preferred.

Instead of greasing the pans, lay two or three ends of cord at intervals across the pans, from side to side. Lay a clean cloth over these, large enough to fold over and completely cover the meat. Press these cloths down into the four corners in the bottom of the pans and fill them with the meat mixture. Fold the cloths over the top and tie them down with the cords. Cook these pans in water held at 160 degrees F., 30 minutes per pound of loaf in a pan. That would make three hours for the 6-pound loaves.

Fourth.—As soon as the loaves are cooked through, whether by boiling or by baking, remove them from the pans. If baked, brush the surface immediately with sugar dissolved in a little water to make a sirup, and let them cool through at room temperature before putting them into the cooler. If boiled, take off the cloths and put the loaves into an oven long enough to heat the surface. Then remove them from the pans, brush them with sirup immediately, and let them cool through at room temperature before putting them into the cooler.

The ham loaves should not be made in larger quantities than can be promptly sold.

Headcheese Loaf



5 pounds hog back fat, either fresh or salted,
8 pounds cured hog tongues,
12 pounds hog rinds, either fresh or cured,
30 pounds cured hog head meat (after removal from bones),
6 pounds Bull-Meat-Brand Flour,
8 ounces Zanzibar-Brand Headcheese Seasoning,
2 to 4 ounces "B" Condimentine,
2 pounds Zanzibar-Brand Savory Jell-Jell,
6 quarts of water in which the meat was boiled,
Salt if necessary.
Total 76 pounds.

The proper way to make headcheese loaf is with meat cured ten to fourteen days in brine made as follows:

1 pound Freeze-Em-Pickle, 7 pounds salt, 5 gallons water.

Headcheese loaf made of meat cured by this process will have a beautiful red color and will keep well in warm weather.

First.—In a steam-jacketed kettle or in a kettle over a fire, boil

the hog back fat, tongues and rinds in as little water as will cover them. As soon as cooked through, remove from the water.

Second.—Cook enough head meat to make 30 pounds without bones.

Third.—Run the fat and head meat through the ½-inch-hole plate of a meat grinder, and the rinds through the ¼-inch plate. Cut the tongues into larger pieces depending upon the proportion of tongues it is desired to show in the loaf.

Fourth.—Mix enough cold water with the Jell-Jell to swell it. Measure the water left after boiling the meat, and if more than 1½ gallons, boil it down to 1½ gallons: if less than 1½ gallons, add enough to make that quantity.

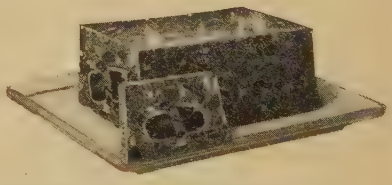
Fifth.—Add the Jell-Jell, Condimentine, seasoning, and Flour to the water. Boil a few minutes, stirring constantly. Add cut meat and tongue, mix thoroughly, and boil about ten minutes more.

Sixth.—Grease pans with lard and fill with headcheese loaf.

Seventh.—Allow to cool: then place in ice box over night, and the next day it will be ready to slice. It should be kept in pans until wanted, as it keeps its color better than when taken out of the pans.

Souse

5 pounds hog back fat, either fresh or cured,
8 pounds hog tongues, Freeze-Em-Pickle cured,
12 pounds hog rinds, either fresh or cured (cured are the best),
30 pounds hog-head meat, Freeze-Em-Pickle cured,
6 pounds Bull-Meat-Brand Flour,



8 ounces Zanzibar-Brand Pickled Tongue Seasoning,
2 to 4 ounces "A" Condimentine,
2 pounds Zanzibar-Brand Savory Jell-Jell,
6 quarts of the water the meat was cooked in,
1 pint 60-grain vinegar,
2 pounds granulated sugar,
2 pounds onions,
Salt, if necessary.
Total 76 pounds.

The proper way to make souse is with meat cured ten to fourteen days in brine made as follows:

1 pound Freeze-Em-Pickle,
7 pounds salt,
5 gallons water.

Souse made with meat cured by this process will have a beautiful red color, and will keep well in warm weather.

First.—In a steam-jacketed kettle or in a kettle over a fire, cook the hog back fat, tongues and rinds in as little water as will cover them. As soon as cooked through remove from the water.

Second.—Cook enough head meat so that when the bones are removed there will be 30 pounds of meat.

Third.—Cut the head meat by hand into ¾-inch cubes and the fat into ½-inch cubes.

Fourth.—Put the rinds through the ¼-inch-hole plate of the meat grinder.

Fifth.—Cut the tongue into large pieces, the size depending upon the proportion of tongue one wishes to show in the loaf. They are usually split lengthwise and placed that way in the pans as they are filled.

Sixth.—Measure the water left after boiling the meat and, if more than 1½ gallons, boil down to that: if less than 1½ gallons, add enough to make that quantity.

Seventh.—Add the Jell-Jell to the hot water first. When it is dissolved, add the sugar and vinegar, "A" Condimentine, seasoning and Bull-Meat-Brand Flour. Boil a few minutes, stirring constantly: then add the cut meat and two pounds of onions, chopped into pieces of about ¼ inch. Mix thoroughly and boil about ten minutes more.

Eighth.—Grease the pans with lard and fill them with the souse, placing as many of the tongue slices in each pan as desired. The more tongue, the better the souse will be.

Ninth.—Allow it to cool, place it in the ice box over night, and the next day it will be ready to slice. It should be kept in pans until wanted, as it keeps its color better than when taken out of the pans.

One can make this souse cheaper by adding 10 to 20 pounds of clean tripe or cooked hog stomachs. They must be chopped into pieces of about ¼ to ½ inch and mixed with the above ingredients. This addition will not impair the quality, but will give the souse a whiter appearance and a good flavor.

NOTE.—If desired, a few slices of lemon can be placed in the bottom of the pans before the souse is filled in. They will appear in the top when it is turned out of the molds. Do not use too much lemon, as it may make the souse taste bitter. Before putting the souse into molds, taste it. Vinegar varies much in strength, and if the product is not sour enough, add more.

Brawn

Formula No. 1

75 pounds hog head meat, Freeze-Em-Pickle cured,
20 pounds hog tongues, Freeze-Em-Pickle cured,
2 pounds Zanzibar-Brand Savory Jell-Jell,
3 gallons water in which the meat was boiled,
1 pound Zanzibar-Brand Headcheese Seasoning,
¼ to ½ pound "B" Condimentine,
½ pound sugar,
1 ounce lemon extract,
Salt, to taste.

First.—Boil sufficient hog heads to make 75 pounds of meat after the bones have been removed. Do not boil any longer than necessary, but just enough so that the meat can be removed easily from the bone.

Second.—Boil the tongues until they are cooked through.

Third.—When cooking the meats be sure to use a steam-jacketed kettle or a kettle over a fire, using as little water as possible.

Fourth.—After the meats are taken out of the kettle, measure the water: if there are more than three gallons, continue boiling and evaporate down to three gallons. Then skim off all the impurities. put the water through a cheesecloth to remove any small particles of meat that may be in it, and skim off all the fat. When this is done dissolve the Jell-Jell, "B" Condimentine, sugar, and lemon extract. If necessary, add salt to the water.

Fifth.—Cut the cooked head meat by hand into ¾-inch cubes, making as few smaller pieces as possible. If one is making headcheese or liver sausage at the same time that the brawn is being made, it is advisable to keep the small pieces of meat for the headcheese or the liver sausage and have only nice cubes of solid meat for the brawn. The tongues are split in two, lengthwise.

Sixth.—Sprinkle the Headcheese Seasoning over the 75 pounds of diced meat, distributing as evenly as possible: then mix well to incorporate the seasoning with the meat.

Seventh.—Grease the pans in which the brawn is to be molded and rub off the surplus, leaving them just greasy enough.

Eighth.—Put the diced head meat into the three gallons liquid and mix thoroughly.

Ninth.—Now start filling the pans. A good method is to pour in enough of the liquid and meat to fill the pans about one-third full; then place lengthwise on top one or two pieces of tongue: then put in another third, add more tongue, and then fill the pans.

Tenth.—Let the pans stand till quite cool: then place them in a chill room or refrigerator and let them stand until the following day. To remove the brawn from the pans, dip them in hot water and it will turn out easily.

Formula No. 2

60 pounds cooked hog head meat after taken from bone, Freeze-Em-Pickle cured,
25 pounds hog or beef cheek meat, Freeze-Em-Pickle cured,
10 pounds hog tongues, Freeze-Em-Pickle cured.

Make in the same manner as No. 1 except to cut the hog head or beef cheek meat and tongues, after being cooked, into one-inch cubes. Then mix all together with the head meat before putting into the pan.

Remember that cheek meat is always quite tough and must be cooked until it is tender.

Glazed, Stuffed Boar Head

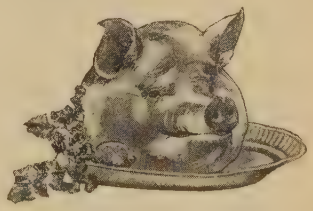
First.—Use a good size pig head, selected from a white hog, cut off about three inches from the ears.

Second.—Remove the bone, using care not to cut through any part of the skin; remove the eyes and the base of the ears, leaving three inches of the bone in the snout, that it may hold its shape.

Third.—Cure in sweet pickle fifteen days. Then take the head out, wash it thoroughly, sew up the mouth and wipe the interior with a dry cloth.

Fourth.—Weigh out the following meats and ingredients:

4 pounds lean pork, Freeze-Em-Pickle cured,
2 pounds lean beef, Freeze-Em-Pickle cured,
1 pound pork back fat,
4 or 5 pig tongues, cold boiled,
2 ounces Dixie Special Pork Sausage Seasoning,
1 ounce salt,
1 ounce granulated sugar,
3 eggs,
½ ounce sweet marjoram,
1 ounce pistachio nuts,
1 pound Bull-Meat-Brand Flour.



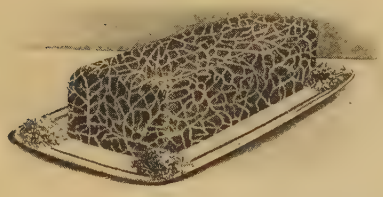
Fifth.—Chop one-third of the pork and beef to pieces about the size of a pea and cut the remainder into ¼-inch cubes. Dice the pork back fat: then add four or five cold, boiled pig tongues, cut into ½-inch cubes.

Sixth.—Mix all the meats together and add one pound Bull-Meat-Brand Flour. Stuff into the pig head, sew a piece of muslin around the back of the head, making sure to sew securely so that the meat cannot be forced back while cooking. Then use some muslin or cheesecloth and bind the head up entirely, to keep it in good shape. Stuff two small potatoes into the ears to hold them in shape.

Seventh.—Cook 4½ to 5 hours in hot water, 155 degrees F. If a smoke flavor is desired place it in the smoke-house for a few hours before cooking.

Eighth.—After the head is cooked, allow it to cool thoroughly before removing any of the cloth. It can be decorated with sugar icing or stiff lard and artificial eyes, or its appearance improved by glazing with Savory Jell-Jell, colored with caramel.

Vienna Meat Loaf



30 pounds fresh beef trimmings,
10 pounds fresh pork trimmings,
10 pounds fresh plain tripe,
4 pounds Bull-Meat-Brand Flour,
3 pounds finely chopped onions,
12 ounces salt,
8 ounces sugar,
2 to 4 ounces "B" Condimentine,
1 ounce Zanzibar-Brand Garlic Compound,
4 quarts water,
8 ounces Zanzibar-Brand Frankfurt Seasoning.
Total 65 pounds.

First.—Chop the meat very fine or run it through the finest plate of a meat grinder.

Second.—Add all the ingredients except the flour and water, and mix them thoroughly with the meat.

Third.—Next add the flour to all and mix well.

Fourth.—Then add the water gradually and mix until it has all been absorbed by the meat and flour.

Fifth.—Sprinkle a little Bull-Meat-Brand Flour on a clean dough board, and mold the mixture into 6-pound loaves, using a liberal quantity of Bull-Meat-Brand Flour to roll it in.

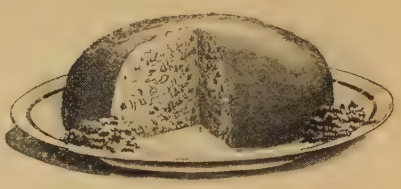
Sixth.—Take some lamb caul fat and wash it thoroughly: then dip it into cold salt water for a few minutes, press it gently between muslin to remove the bulk of the moisture, spread it and cut in large enough pieces, double thickness, to wrap completely around the loaf.

Seventh.—Place in oblong greased bake pans and bake 2½ to 3 hours in a medium-heated oven.

Eighth.—Allow to cool thoroughly: then place in the cooler or ice box over night. The next day it may be removed from the bake pans for slicing and sale.

The caul fat produces an attractive appearance. If this formula is followed out correctly, it will be found a profitable and ready selling product.

Hungarian Goulash Loaf



5 pounds tallow trimmings or hard beef fat, run through the finest plate of a meat grinder,
35 pounds fresh beef trimmings,
10 pounds fresh pork trimmings,
5 pounds lean mutton stew meat,
8 pounds Bull-Meat-Brand Flour,
12 ounces Zanzibar-Brand Chile Powder,
2½ ounces Zanzibar-Brand Garlic Compound,
2 pounds salt,
10 pounds carrots, boiled 20 minutes and then cut into ½-inch cubes,
7½ pounds fresh onions chopped into ½-inch cubes,
2 to 4 ounces "A" Condimentine,
8 ounces granulated sugar,
6 ounces chopped parsley,
1 gallon canned tomatoes,
2 pounds celery cut into ½-inch cubes,
10 quarts water.
Total, 114 pounds.

First.—Run the tallow or hard beef fat through the finest plate of a meat grinder, and the beef, pork and mutton through the ⅜-inch plate.

Second.—Braise the meats with tallow or fat until brown, in a steam-jacketed kettle or in a kettle over a fire.

Third.—After the meats are braised, add the water, Chile Powder, Garlic Compound, salt, "A" Condimentine, and sugar.

Fourth.—Cut the celery and carrots into ½-inch cubes, chop the onions into ½-inch pieces, chop the parsley fine, mash the tomatoes well, and add all to the meats and other ingredients in the kettle.

Fifth.—Cook the meats and vegetables about 15 or 20 minutes, until they are cooked through. Then add the Bull-Meat-Brand Flour, stirring constantly so that it will not become lumpy or burn. Continue cooking and stirring until the flour is done.

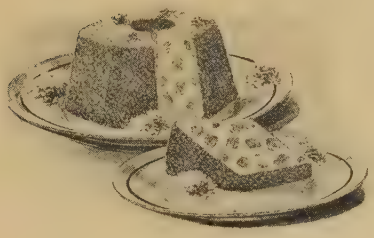
Sixth.—Pour into well greased pans and allow to cool. Put into the ice box over night, and the next day it will be ready for sale.

Hungarian goulash loaf can be made of all beef if desired, by using beef brisket instead of the 10 pounds of pork trimmings.

How to Serve

Break Hungarian goulash loaf into small pieces in a frying pan or stew pan, add an equal quantity of water, heat until it becomes thick, and then serve.

Harvard Loaf



20 pounds lean fresh beef,
10 pounds cooked hog snouts,
10 pounds fresh plain tripe,
5 pounds smoked boneless shoulder butts,
5 pounds Bull-Meat-Brand Flour,
12 ounces salt,
8 ounces Zanzibar-Brand Hamburger Sausage Seasoning,
1 ounce Zanzibar-Brand Garlic Compound,
2 to 4 ounces "B" Condimentine,
4 quarts cold water.
Total, 65 pounds.

First.—Cook the hog snouts until the meat may easily be stripped from the bones. Remove all the meat from the bones and allow it to cool thoroughly.

Second.—When the hog snouts are cool, cut them by hand into ½-inch cubes; also cut the smoked shoulder butts into similar cubes.

Third.—Run the lean fresh beef and the tripe through the finest plate of a meat grinder and grind them very fine.

Fourth.—Mix the flour, salt, seasoning and Zanzibar-Brand Garlic Compound, and when thoroughly mixed, add them to the meats and mix well.

Fifth.—Gradually add the four quarts of cold water to the mixture, again mixing well while adding it. When thoroughly mixed, it is ready to be baked.

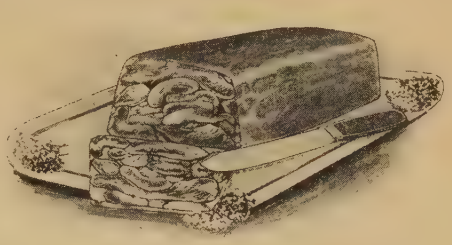
Sixth.—Grease with lard some pans holding about six pounds each, and fill them with the Harvard loaf mixture. The pans may be any shape desired.

Seventh.—Bake in a medium oven 2½ to 3 hours. Allow to cool for several hours; then place in ice box over night, and the following day it will be ready for slicing.

Harvard loaf, when sliced, presents a very appetizing appearance. It has an exceptionally fine flavor and is a ready seller.

Ox-Lip-and-Hog-Snout Loaf

30 pounds cured ox lips,
20 pounds cured hog snouts,
1 pound Zanzibar-Brand Savory Jell-Jell,
8 ounces Zanzibar-Brand Corned Beef Seasoning,
2 to 4 oz. "B" Condimentine,
1 pint 60-grain vinegar,
6 quarts water the meat was cooked in.
Total, 60 pounds.



First.—Clean the ox lips and hog snouts thoroughly and shave off all hair. Then cure them two or three weeks in a brine made of 5 gallons water, 5 pounds salt, one pound Freeze-Em-Pickle, 2 pounds granulated sugar.

Second.—When cured, cook the ox lips and hog snouts until tender in just enough water to cover them.

Third.—When cooked, slice the ox lips and hog snouts ½ inch thick, the slices as long and wide as possible.

Fourth.—Add the Corned Beef Seasoning and Condimentine to the meat and mix well.

Fifth.—Take the water the meat was cooked in and boil it down until there are only 6 quarts left. Mix one pound Savory Jell-Jell with the cold vinegar and let it swell one to two minutes. Then add this to the water the meat was boiled in, and heat for a minute to dissolve the Jell-Jell.

Sixth.—Place large pieces of sliced ox lips in bottom of pan to form the bottom layer: fill nearly full with layers of sliced hog snouts, fill in holes with small pieces and cover with another layer of ox lip slices. When the pans are filled pour the hot soup and Jell-Jell over the meat, allow to cool, and then place them in the ice box over night. The next morning the loaves will be ready to slice.

Ox-lip-and-hog-snout loaf is served cold. It is a very economical product and a ready seller.

Fancy Dutch Lunch Loaf

12 pounds fresh lean pork,
5 pounds fresh lean beef,
13 pounds fresh lean veal,
5 pounds cooked dry-salt pork,
5 pounds cooked smoked ham or shoulder,
5 pounds cooked hog or beef tongues,
2½ pounds bologna, 2½ inches in diameter,
2½ pounds narrow frankfurts,
8 ounces Zanzibar-Brand Frankfurt Sausage Seasoning,
8 ounces salt,
2 to 4 ounces "B" Condimentine,
5 pounds Bull-Meat-Brand Flour,
1½ gallons water.
Total, 68 pounds.

First.—Run the lean pork, beef and veal through the finest plate of a meat grinder once or twice so as to grind it fine.

Second.—Mix the seasoning, salt, Condimentine, and flour with the ground meats. When these are well mixed, gradually add the 1½ gallons water and mix it in thoroughly.

Third.—Cook the dry-salt pork and ham or shoulder until they are cooked through, and when cold, cut the salt pork into ½-inch cubes, and the ham or shoulder and the tongues into strips one inch square and as long as possible.

Fourth.—Remove the skin from the bologna and cut lengthwise in such designs as triangles, diamonds, etc.

Fifth.—Grease some oblong bread pans with lard and put in a layer of the mixed ground meat about one inch deep. Then squeeze down into the meat a row of frankfurts along both sides of the pan, and a strip each of tongue and ham.

Sixth.—Then put some more of the ground meat on top of this and follow with another layer, placing a design cut out of the bologna in the center. Continue filling the pan and putting in the designs as illustrated above or any design desired. See that ground meat is packed tightly to leave no air spaces in the loaf.

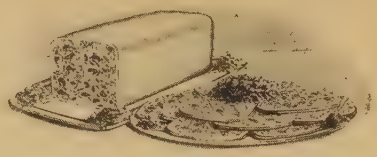
Seventh.—Bake 3 hours, beginning at 200 degrees F. and gradually raising the temperature to 340 degrees at the last half hour.

Eighth.—When baked, and still hot, brush the top with dilute sirup to make a nice brown crust. Allow it to cool several hours and then place in the ice box over night. The following day it will be ready for slicing. When sliced it makes a pretty appearance.

Chicken-Ham-and-Tongue Loaf

(Roulade)

12½ lbs. very lean fresh pork,
7½ lbs. very lean fresh beef,
7½ lbs. Freeze-Em-Pickle dry-cured or sweet-pickle pork or beef trimmings,
7½ lbs. plain fresh tripe,
5 lbs. chicken,
5 lbs. fat trimmings from cured hams,
5 lbs. pickled pork tongues,
8 oz. Zanzibar-Brand Poultry Seasoning,
8 oz. salt,
4 oz. Freeze-Em-Pickle,
2 to 4 oz. "B" Condimentine,
2 oz. fresh green parsley,
1 oz. lemon extract,
6 qts. soup stock,
5 lbs. Bull-Meat-Brand Flour.
Total, 68 pounds.



First.—Boil the chickens until tender with 1½ gallons of water in a steam-jacketed kettle or in a kettle over a fire.

Second.—Remove the bones and allow the meat to get cold.

Third.—Select the best meat and cut it into ½-inch cubes.

Fourth.—Chop the skin, fat, and small pieces of the chicken fine with the tripe, fresh beef and fresh pork trimmings, or run it all through a fine plate of the meat grinder.

Fifth.—Boil the sweet-cured pork trimmings and the ham fat 30 minutes in the same water the chickens were cooked in.

Sixth.—When cold, cut the meat into ¾-inch cubes and the ham fat into ¼-inch cubes.

Seventh.—Cook pork tongues 1½ hours or beef tongues 3 hours in the same water. When cold, cut into ¾-inch cubes.

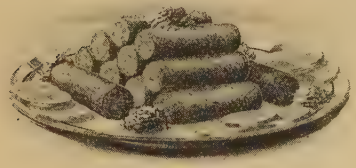
Eighth.—Mix together all ingredients except meat broth.

Ninth.—Add the 1½ gallon soup stock and mix thoroughly.

If to be sold unbaked, cool thoroughly before offering for sale. If to be baked, line pans holding about 6 pounds each with slices of salt back fat, ⅛ inch thick, and fill them with the mixture. See that there are no air holes between the meat and pan, and bake in a moderately heated oven 2½ to 3 hours. Cool and then place in ice box over night. The next morning it will be ready for slicing.

This makes a beautiful loaf: the back fat shrouds the meat, making appetizing slices.

Chicken-Ham-and-Tongue Timbales

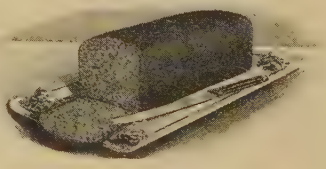


The chicken-ham-and-tongue mixture may be made into timbales by forming it into rolls 3 inches long and ¾ inch thick. Shape them on a board, using Bull-Meat-Brand Flour liberally to cover well. Place on a platter and decorate with parsley.

Chicken-ham-and-tongue timbales are a good seller. The housewife fries them in a little butter or lard until nicely browned and serves them hot, garnished with a few slices of lemon and sprigs of parsley.

Brunswick Loaf

(Braunschweiger)



15 pounds fresh lean pork trimmings,
15 pounds fresh boned beef briskets,
7½ pounds veal stew or shank meat,
7½ pounds plain fresh tripe,
5 pounds smoked shoulder or smoked shoulder butts,
5 pounds Bull-Meat-Brand Flour,
2 to 4 ounces "B" Condimentine,
½ ounce Zanzibar-Brand Garlic Compound,
2 pounds ripe or canned tomatoes,
½ gallon ox blood (strained),
3 quarts cold water.
8 ounces Zanzibar-Brand Bologna Seasoning,
4 ounces Freeze-Em-Pickle,
8 ounces salt.
Total, 70 pounds.

First.—Run the fresh tripe through the fine plate of a meat grinder.

Second.—Run the briskets, pork and veal through the ¼-inch-hole plate of a meat grinder.

Third.—Cut the smoked shoulder butts into ½-inch cubes by hand.

Fourth.—Add the flour to the meat and mix well.

Fifth.—Add all the other ingredients and mix well for a few minutes. The ox blood and cold water should be added last and must be thoroughly mixed with the other ingredients.

Sixth.—Put into well greased pans holding about 6 pounds each, and bake in a medium heated oven 2½ to 3 hours. Allow to cool for several hours, and then put in ice box over night. The next day the loaves may be removed from the pans, ready for slicing.

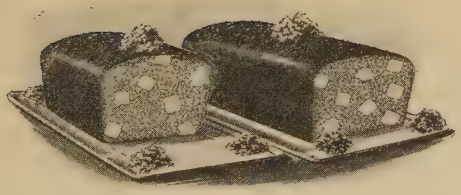
Brunswick Timbales

The Brunswick loaf mixture can be made into timbales by making it into rolls 3 inches long and ¾ inch thick. Shape and roll them on a dough board, using Bull-Meat-Brand Flour liberally to cover well, place them on a dish or platter and decorate with parsley and Zanzibar-Brand Chile Powder.

Brunswick timbales are a good seller, and all the housewife has to do with them is to fry them in a little butter or lard until nicely browned and serve them on a plater, garnished with a few slices of lemon or sprigs of parsley.

They are delicious eating and will bring many repeat orders.

Mortadella Loaf



40 pounds very lean dry-cured pork trimmings,
8 pounds lean, cured beef trimmings,
7 pounds solid back fat,
5 pounds Bull-Meat-Brand Flour,
8 ounces Zanzibar-Brand Frankfurt Sausage Seasoning,
2 to 4 ounces "B" Condimentine,
4 ounces granulated sugar,
5 quarts water.
Total, 71 pounds.

First.—Place the lean, cured pork and beef trimmings in a silent cutter and chop very fine.

Second.—Add the flour, seasonings and water to the meats while chopping them.

Third.—When the meat is chopped fine enough remove the contents of the silent cutter to a mixer.

Fourth.—Cut the back fat into ½-inch cubes, add to the meats and other ingredients in the mixer, and mix for a few minutes.

Fifth.—When thoroughly mixed put into well greased bread pans holding about 6 pounds each, and bake in a moderately heated oven 2½ to 3 hours.

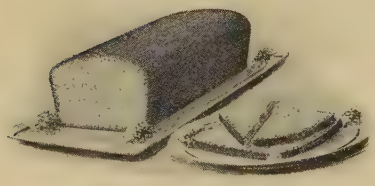
Sixth.—Allow to cool thoroughly: then place in ice box over night. It is then ready to be sold.

Some people prefer wine in mortadella loaf. Where wine is lawful, use ½ gallon madeira wine and reduce the quantity of water accordingly: elsewhere ½ ounce Zanzibar-Brand Imitation Rum Flavor may be used.

If the pork and beef trimmings are first cured with Freeze-Em-Pickle for two weeks, this loaf will have a better color and will taste much better and keep longer than if made of fresh meat.

If one has no silent cutter, but only a meat grinder, the above can be made by using a plate with 5/64-inch holes and running the meat through several times. Then place in a mixer or mix by hand, adding the other ingredients while the mixing is being done.

Enchilada Loaf



25 pounds fresh pork trimmings,
10 pounds fresh beef trimmings,
4 pounds Bull-Meat-Brand Flour,
1 pound salt,
3 ounces Zanzibar-Brand Chile Powder,
2 to 3 ounces "B" Condimentine,
1 ounce Zanzibar-Brand Garlic Compound,
1 gallon tomato catsup,
3 quarts cold water.
Total, 55 pounds.

First.—Chop the pork and beef very fine or run them through the finest plate of a meat grinder. The finer they are ground or chopped the better the loaf will be.

Second.—Add the salt, Chile Powder, Garlic Compound and "B" Condimentine to the meats and mix well.

Third.—Add the Bull-Meat-Brand Flour and mix thoroughly with the meat and other ingredients.

Fourth.—Add the catsup and water to the above and mix until the water is all taken up by the meat and flour. It is then ready to be put into the pans.

Fifth.—Pour the loaf mixture into well greased pans holding about 6 pounds each, and place lengthwise throughout the mixture cooked macaroni, or strips of dough made up as described on next page.

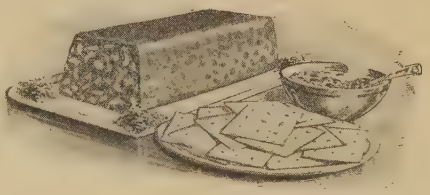
Sixth.—Bake in a medium heated oven 2½ to 3 hours. Allow to cool, and put into the cooler or ice box over night. The next day it will be ready for sale.

If desired, macaroni may be laid lengthwise in the loaf or a dough may be made as follows, cut into strips ½ inch wide and the length of the pan, and used instead of the macaroni:

3 pounds wheat flour,
2 pounds Bull-Meat-Brand Flour,
1 pound kidney suet, chopped fine,
6 ounces Heller's Fancy-Pastry Baking Powder,
Cold water to make a dough as for pie crust.

Enchilada loaf may be served cold or sliced and fried in butter or lard and served hot.

Chile-Con-Carne Loaf with Frijoles (Beans)



12 pounds bayou or kidney beans,
15 pounds beef chuck meat,
8 pounds pork trimmings,
6 pounds beef tallow (rendered),
½ gallon catsup,
1 quart 60-grain white vinegar,
6 ounces Zanzibar-Brand Chile Powder,
1 pound sugar,
1 pound salt,
4 pounds Bull-Meat-Brand Flour,
1½ ounces Zanzibar-Brand Garlic Compound,
2 gallons hot water.
Total, 70 pounds.

First.—Take enough water to cover the beans and add 2 ounces baking soda to it: soak the beans in this water over night.

Second.—The next morning take the beans out of this water and put them into fresh water. Cook the beans until soft but do not boil them long enough to burst the skins.

Third.—Run the beef and pork trimmings through the ¼-inch-hole plate of a grinder.

Fourth.—Place the ground meat and rendered beef tallow in a steam-jacketed kettle or in a kettle over a fire and braise until brown.

Fifth.—Add the 2 gallons of hot water to the meat when it is properly braised, and bring it to a boil. Add the catsup, vinegar, Chile Powder, salt, and Garlic Compound: boil 15 or 20 minutes.

Sixth.—Then add the beans, mix well, and let simmer 30 minutes more.

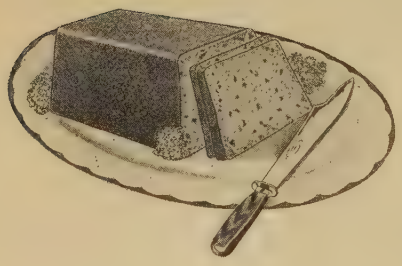
Seventh.—Mix Bull-Meat-Brand Flour with enough cold water to make a smooth paste. Add to meat and beans; mix thoroughly. Cook until good and thick, stirring constantly.

Eighth.—Grease the pans with lard and fill them with this mixture. Place on slabs so as to allow cold air to pass under them, and when cold put into the ice box and allow to remain there over night. The next day they may be turned out of the pans and wrapped in parchment paper for wholesale trade, or they may be wholesaled in the tin pans.

To eat this chile con carne, break into small pieces in a frying pan, add its equal in water and heat it: it is then ready to serve. This makes genuine Mexican chile con carne with frijoles—chile with meat and beans.

Pimento Cheese

(Also Known as Pimento Loaf)



15 pounds beef, Freeze-Em-Pickle cured,
15 pounds lean pork, Freeze-Em-Pickle cured,
20 pounds pork trimmings (¼ fat), Freeze-Em-Pickle cured,
2 to 4 ounces "B" Condimentine,
5 pounds Bull-Meat-Brand Flour,
1 pound pimentos, coarsely ground,
4 ounces sugar,
8 ounces Zanzibar-Brand Frankfurt Sausage Seasoning,
Sufficient cracked ice or ice water to cool the meat while chopping and to give the meat the proper consistency.

First.—Run the beef through the 5/64-inch-hole plate of the meat grinder and the pork through the ⅛-inch-hole plate, adding the crushed ice or ice water while grinding.

Second.—Mix thoroughly, adding the flour and seasonings.

If you have a silent cutter, grind the meats through the ⅛-inch-hole plate of a meat grinder, keeping beef and pork separate. Then chop the beef in the silent cutter about 3 minutes, while slowly adding the flour and water. Then add the pork and seasonings except pimentos, chopping about one minute more: then add the pimentos and chop for another minute.

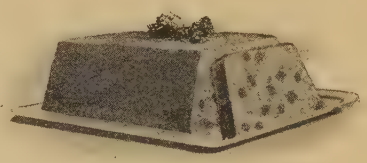
Third.—Put into greased tins of desired size, usually 6-pound size, not quite filled.

Fourth.—Bake about 3¼ hours, keeping the oven at 250 degrees F. the first hour, 300 the second hour, and 350 the third hour or till done.

Fifth.—Remove from tins while hot, brush with hot white sirup, and let cool through at room temperature before removing to cooler. It is then ready for sale.

Chop Suey Loaf

5 pounds fat salt pork,
10 pounds fresh lean pork,
5 pounds fresh lean beef,
15 pounds onions,
10 pounds celery,
4 pounds Bull-Meat-Brand Flour,
8 ounces salt,
2 ounces "A" Condimentine,
6 ounces Zanzibar-Brand Chile Powder,
10 ounces sugar,
12 ounces Worcestershire sauce,
4 quarts water.
Total, 60 pounds.



First.—Cut the salt pork, fresh pork and beef into ½-inch cubes by hand. Fry until all the fat is out. Take the meat out of the fat and put aside until needed.

Second.—Cut the celery and onions into ½-inch cubes and the fresh pork and beef into ¾-inch cubes. Fry all together with the salt pork fat until tender and of a nice brown.

Third.—Add the other ingredients except the Bull-Meat-Brand Flour, and cook 5 or 10 minutes, stirring occasionally.

Fourth.—Add the flour gradually, stirring constantly to prevent it from burning or becoming lumpy. Boil slowly 15 or 20 minutes longer until the flour is thoroughly cooked. It is then ready for the pans.

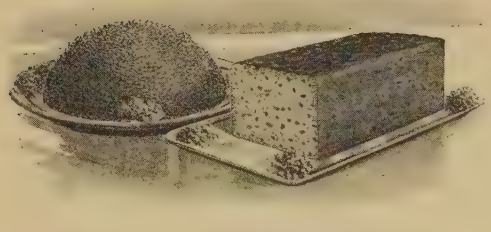
Fifth.—Pour into well greased pans holding about 6 pounds each, and put away to cool.

How to Serve

Chop suey loaf is served by breaking it into small pieces in a frying pan or stew pan, adding an equal quantity of water, and heating until it becomes thick.

This makes a very nicely flavored chop suey, equally as good as any Chinese chop suey, and much less expensive. The butcher or manufacturer of delicatessen food products who makes chop suey loaf according to this formula will find it a good and profitable seller.

Chorizos Loaf



25 pounds pork trimmings, cured with Freeze-Em-Pickle,
5 pounds fat beef flank trimmings, cured with Freeze-Em-Pickle,
5 pounds Bull-Meat-Brand Flour,
1 quart 60-grain white vinegar,
1 quart tomato catsup,
3 quarts cold water,
5 ounces Zanzibar-Brand Spanish style Sausage Seasoning.
6 ounces salt,
2 to 3 ounces "B" Condimentine,
6 ounces granulated sugar,
1 ounce Zanzibar-Brand Garlic Compound.
Total, 65 pounds.

First.—Run the pork, beef, and flank trimmings through the 3/8-inch-hole plate of a meat grinder.

Second.—Add the Chile Powder, "B" Condimentine, salt, Garlic Compound and sugar to the meat and mix well.

Third.—Mix the vinegar, catsup and water together and add the mixture to the meat. Keep on mixing the meat while the water is being added.

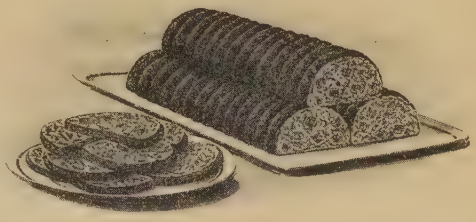
Fourth.—Next add the flour to the other ingredients and mix thoroughly.

Fifth.—Mold into 6-pound loaves and place in oblong, well greased bake pans. Bake in a medium heated oven for 2½ to 3 hours and allow to cool before placing in the cooler or ice box. The following day it will be thoroughly set and ready for slicing.

Chorizos loaf may be sold uncooked, in bulk, and the housewife can make it into cakes, rolls or balls to be fried. It makes a most appetizing dish for those who relish Spanish or Mexican cooking.

The quantity of Zanzibar-Brand Garlic Compound to use depends entirely upon the taste. In some sections people require a larger proportion of seasoning than in others. For hotels and restaurants a smaller proportion should be used. The dealer who is the quickest to learn his customers' wants and makes an effort to supply them is most likely to meet with success.

Luncheon Delicacy



12 pounds Freeze - Em - Pickle cured hog snouts,
8 pounds Freeze - Em - Pickle cured ox lips,
5 pounds Freeze - Em - Pickle cured hog tongues,
8 pounds Freeze - Em - Pickle cured hog skins,
5 pounds Freeze - Em - Pickle cured hog cheek meat,
5 pounds fresh hog stomachs, cooked,
8 pounds fresh plain tripe, cooked,
1 pound Zanzibar-Brand Savory Jell-Jell,
8 ounces Zanzibar-Brand Frankfurt Sausage Seasoning,
8 ounces sugar,
2 to 4 ounces "B" Condimentine,
½ ounce Zanzibar-Brand Garlic Compound,
1 quart 60-grain vinegar,
4 quarts of the water the meat was cooked in.
Total, 62 pounds.

Luncheon delicacy must be made of fully cured meat. The hog snouts, ox lips, hog tongues and hog skins should be cured in brine made of Freeze-Em-Pickle, sugar and salt, and should be fully cured so that the meat is nice and red. The hog cheek meat should be dry cured, but must be fully cured through.

First.—In a jacketed kettle or in a kettle on a fire, boil the different kinds of meat in as little water as will cover them, until they are cooked through.

Second.—When the different meats are cooked, run all of them except the tongues through the ½-inch-hole plate of a meat grinder. Cut the tongues into ¾-inch cubes.

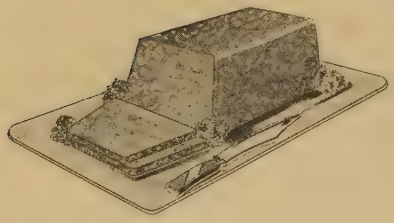
Third.—If there is more than one gallon of water in the kettle, boil it down to one gallon.

Fourth.—Take one pound of Zanzibar-Brand Savory Jell-Jell and add enough cold water to it to swell it. Then mix it with the gallon of water the meat was cooked in. Also add the seasonings, sugar and vinegar to the water. Put everything into the kettle, mix it thoroughly, and boil about five or ten minutes. It is then ready to be put into the pans.

Fifth.—Grease 6-pound bread pans with lard and fill with this mixture. Allow it to cool an hour or two and then place in the ice box over night. The next day it will be ready for slicing. If desired, fancy molds or pans may be used instead of ordinary bread pans. They will give the loaves a more appetizing appearance.

Macaroni-and-Cheese Loaf

(Known Also as Spice Loaf)



36 pounds pork trimmings, Freeze-Em-Pickle cured,
9 pounds beef trimmings, Freeze-Em-Pickle cured,
2½ pounds American or parmesan or Roman cheese,
2½ pounds macaroni, in 1-inch lengths, partly cooked,
2½ pounds Bull-Meat-Brand Flour,
2 pounds well chilled fresh or canned tomatoes,
1 pound onions,
12 ounces fresh or canned pimentos,
8 ounces Zanzibar-Brand German-Style Pork Sausage Seasoning,
4 ounces bleached pistachio nuts,
4 ounces sugar,
2 to 4 ounces "B" Condimentine,
½ ounce Zanzibar-Brand Garlic Compound,
Total, 55 pounds.

First.—Put the beef trimmings into the silent cutter. After a few turns, add the pork, and then the tomatoes, onions, Bull-Meat-Brand Flour, Zanzibar-Brand Pork Sausage Seasoning, Condimentine, sugar, and Garlic Compound. If added salt is believed necessary, this is the time to add it.

Second.—When the mixture is chopped fine, put it into the power mixer or into a tub for hand mixing.

Third.—Cut the cheese into ½-inch cubes; grind the pimentos through the ¼-inch-hole plate of the meat grinder; add the cubes of cheese, the half-cooked macaroni, ground pimentos and pistachio nuts to the mixture in the power mixer or in the tub.

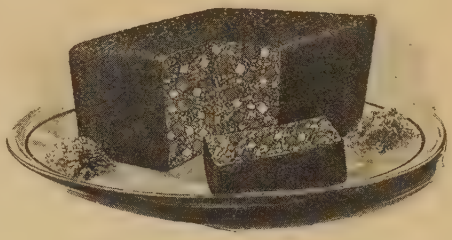
If the appearance of the cheese in cubes is not considered essential for display purposes, the eating quality of the loaf may be improved by grating the cheese instead of cutting it into cubes and then adding it.

Fourth.—When well mixed without breaking the macaroni and cheese, put into greased pans, each holding about 6 pounds, and bake in a moderately heated slow oven 2½ to 3 hours.

Fifth.—Allow to cool through at room temperature before putting into the ice box; then keep cool till sold.

It is better to leave the surface unbrowned, that the macaroni and cheese may be visible in display. If a browned surface is preferred, invert the loaf immediately on coming out of the oven and promptly brush it with hot dilute sirup.

Barley-Blood-And-Tongue Loaf



5 pounds leaf lard or top back fat, or beef suet,
10 pounds beef or pork cracklings,
12 pounds cured hog or beef tongues,
5 pounds hog skins,
5 pounds pearl barley,
4 pounds finely chopped onions,
½ pound salt,
6 ounces Zanzibar-Brand Blood Sausage Seasoning,
2 to 3 ounces "B" Condimentine,
1 ounce Zanzibar-Brand Garlic Compound,
1 gallon ox blood,
2½ gallons of the water the meats were cooked in,
4 pounds Bull-Meat-Brand Flour.
Total, 71 pounds.

First.—Put the hog or beef tongues into a steam-jacketed kettle or into a kettle over a fire and boil them until they are tender.

Second.—Remove the tongues and skins from the kettle and cook the barley in the same water 1½ hours, stirring occasionally.

Third.—Skin the cooked tongues and cut them into ½-inch cubes.

Fourth.—Run the cracklings and the skins from the tongues through the finest plate of a grinder. The finer they are ground the better the loaf will be.

Fifth.—Run the hog skins and the fat through the ¼-inch-hole plate of a grinder.

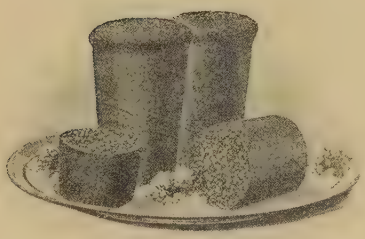
Sixth.—After the barley has boiled 1½ hours in sufficient water to cover it, add the ground fat, cracklings, skins of tongues, hog skins, diced tongues, ox blood and other ingredients with the exception of the flour, and boil 30 minutes longer. Strain blood through cheesecloth or fine sieve before adding it to the barley.

Seventh.—Next add the Bull-Meat-Brand Flour gradually, stirring constantly to prevent it from burning or becoming lumpy. Boil slowly 15 or 20 minutes; it is then ready to be put into the pans.

Eighth.—Grease 6-pound pans thoroughly with lard and fill them with the mixture. Allow to cool and put into the ice box over night. The next day it will be ready for sale.

Barley-blood-and-tongue loaf can be eaten cold or fried in butter or lard and eaten hot.

Barley-Blood Pudding



3 pounds leaf lard or top back fat, or beef suet,
5 pounds beef or pork cracklings,
4 pounds pearl barley,
2 pounds finely chopped onions,
1 to 2 ounces "A" Condimentine,
¾ pound salt,
3 ounces Zanzibar-Brand Blood Sausage Seasoning,
¼ ounce Zanzibar-Brand Garlic Compound,
½ gallon ox blood,
2 gallons boiling water,
2 pounds Bull-Meat-Brand Flour.
Total, 35 pounds.

First.—Cook the 4 pounds of pearl barley 1½ hours in a double boiler containing 2 gallons of boiling water. Stir occasionally and, as the water evaporates, restore the lost portion.

Second.—Run the fat and cracklings through the finest plate of a meat grinder and add them to the barley after it has cooked 1½ hours. At the same time, add all the other ingredients except the Bull-Meat-Brand Flour. Strain the ox blood through cheesecloth or a fine strainer before adding it to the barley. Boil all together 30 minutes before adding the flour.

Third.—Add the Bull-Meat-Brand Flour gradually, stirring constantly to prevent it from burning or becoming lumpy. Boil 15 to 20 minutes. It is then ready for the pans.

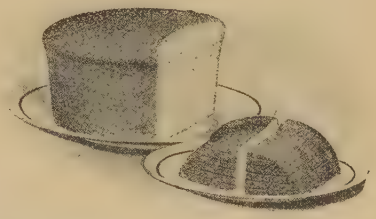
Fourth.—Grease the pans or molds and fill them with the hot pudding. Allow to cool and then put into the ice box over night. The next day it can be sliced in any quantity desired.

This is one of the most satisfactory products the butcher or manufacturer of delicatessen food products can make. It is quickly and easily prepared, and because of the inexpensive ingredients used in making it, it can be sold very cheaply and yet give the maker a nice profit. Barley is one of the most healthful of all foods, and when prepared in this appetizing manner it will be appreciated by many.

Barley-blood pudding should be sliced ½ inch thick, fried in butter or lard and eaten hot.

Barley Pudding

3 pounds leaf lard or top back fat, or beef suet,
5 pounds beef or pork cracklings,
4 pounds pearl barley,
2 pounds finely chopped onions,
¼ pound salt,
1 ounce "A" Condimentine,
2 ounces Royal Zest Poultry Seasoning,
2 gallons boiling water,
2 pounds Bull-Meat-Brand Flour.
Total, 30 pounds.



First.—Put the 4 pounds of pearl barley in a double boiler containing 2 gallons of boiling water, and cook about 1½ hours. Stir occasionally, and as the water evaporates add more as necessary.

Second.—Run the fat or suet and cracklings through the finest plate of a meat grinder: add them, together with the seasonings, to the barley about a half hour before it is done. Boil 30 minutes longer before adding the flour.

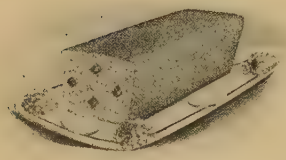
Third.—Add the Bull-Meat-Brand Flour gradually, stirring constantly to prevent it from burning or becoming lumpy. Boil slowly 15 to 20 minutes. It is then ready to pour into the pans or molds.

Fourth.—Grease pans or molds holding about 6 pounds each and fill them with the above mixture. Allow to cool thoroughly and then put into the ice box over night. The next day it will be ready for sale.

Barley pudding should be sliced about ½ inch thick, fried in butter and eaten hot. This makes a very delicious dish and one that will prove a ready seller. It is one of the many articles of food which will pay the butcher nicely for his trouble.

Beef and pork cracklings, when cleanly handled and properly prepared, give meat loaves of all kinds a delicious flavor. They can also be worked into sausage to good advantage.

Oxford Loaf



20 pounds fresh lean beef trimmings,
5 pounds fresh beef hearts,
5 pounds fresh plain tripe,
10 pounds fresh pork trimmings,
5 pounds cooked salt jowl fat,
5 pounds cooked lean corned beef,
5 pounds Bull-Meat-Brand Flour,
8 ounces Zanzibar-Brand Frankfurt Sausage Seasoning,
1 ounce Zanzibar-Brand Garlic Compound,
4 ounces sugar,
4 ounces blanched pistachio nuts,
2 pounds finely chopped onions,
2 to 4 ounces "B" Condimentine,
12 ounces salt,
1 gallon cold water.

Total, 65 pounds.

First.—Cut the cooked jowl fat and cooked corned beef into one-inch square strips, as long as possible, and lay aside.

Second.—Run all the other meats through a meat grinder, using a plate with ⅛-inch holes.

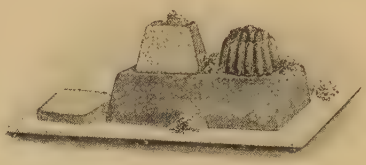
Third.—Add the flour to the ground meat and then mix thoroughly.

Fourth.—Mix the meat, flour and all other ingredients together, except the strips of jowl fat and corned beef and the pistachio nuts. The water should be added to the mixture slowly after the meat and other flour have been thoroughly mixed together.

Fifth.—Grease oblong pans holding about 6 pounds each and fill them one-fourth full of the mixed meat loaf. Lay strips of jowl fat and corned beef alternately as shown in the above reproduction of oxford loaf, and here and there place a pistachio nut. Then fill pans half full and repeat putting in strips of fat, corned beef and a few pistachio nuts. Next fill three-fourths full and repeat once more: then fill pans with meat and it will be ready to bake.

Sixth.—Bake in a medium oven 2½ to 3 hours, depending upon the temperature of the meat when placed in the oven. The colder the meat is when placed in the oven, the longer it takes to bake it. Let cool over night before removing from the pan, whereupon it will be ready for slicing.

Savory Loaf



10 pounds fresh hog livers,
8 pounds cured hog hearts,
3 pounds cured beef trimmings,
4 pounds fresh tripe,
7 pounds cured hog skins,
3 pounds cured ox lips,
6 ounces Zanzibar-Brand Liver Sausage Seasoning,
4 pounds Bull-Meat-Brand Flour,
2 to 3 ounces "B" Condimentine,
1 pint 60-grain vinegar,
1 ounce Zanzibar-Brand Garlic Compound,
2 pounds finely chopped onions,
3 ounces Zanzibar-Brand Chile Powder,
1 pound Savory Jell-Jell,
1 gallon water.

Total, 50 pounds.

First.—Cook all the meats in the same water in a steam-jacketed kettle or in a kettle over fire, as follows: hog livers, 20 minutes; ox lips, tripe, hearts, beef trimmings, and hog skins, until tender.

Second.—When the meat is all cooked through, remove from the kettle and allow to cool.

Third.—Run the cooked livers and hog skins through the finest plate of a meat grinder. Put all the other meats through the ¼-inch-hole plate.

Fourth.—Measure the soup stock, and if there are more than four quarts, keep boiling until it is reduced to that quantity. If it is less than four quarts, add enough water to make a gallon.

Fifth.—Add to the soup stock all the Zanzibar-Brand Seasonings, Garlic Compound, "B" Condimentine, and chopped onions.

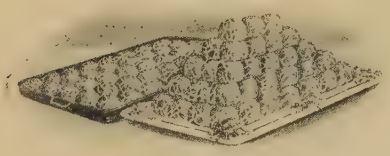
Sixth.—Soak the Savory Jell-Jell for one minute in sufficient cold water to swell it, and add it to the soup stock.

Seventh.—Mix the flour with enough cold water to make a paste and gradually add it to the soup stock, stirring constantly. Boil 15 minutes.

Eighth.—When the meat is all cut, place it in the kettle with the jellied soup stock and stir well. When all the ingredients are in the kettle, allow it to simmer for 30 minutes, stirring constantly that it may not burn.

Ninth.—Fill pans or fancy molds holding about 6 pounds each, allow it to cool for a few hours and then place in the cooler or ice box. Leave in cooler over night and it will then be ready for sale or slicing.

Savory Ducks



15 pounds hog or sheep plucks,
10 pounds beef or pork odds and ends of cooked or uncooked meat,
5 pounds cooked hog skins or lean pig heads,
5 pounds onions,
3 pounds Bull-Meat-Brand Flour,
8 ounces salt,
6 ounces Royal Zest Poultry Seasoning,
2 to 3 ounces "B" Condimentine,
1 gallon water the hog skins were cooked in.
Total, 47 pounds.

First.—Cook the hearts, plucks and meat odds and ends 20 minutes; cook the hog skins until done.

Second.—Chop the cooked hog skins fine or run them through the 7/64-inch-hole plate of a meat grinder. Run the other cooked meats through the ¼-inch-hole plate. Chop the onions into small pieces so that they may be seen throughout ducks when finished.

Third.—Add the flour and seasonings to the meats and mix thoroughly, then add the water and mix until it is all taken up by the flour and meats.

Fourth.—Mold into 4-ounce balls and wrap completely with hog caul fat. Place snugly in well filled pans that the ducks may hold their shape, and bake in the oven 35 minutes.

They can be served hot or cold.

Tamales

15 pounds boneless plate beef trimmings,
5 pounds pork trimmings,
½ pound finely chopped beef suet, butter or lard,
¼ pound lard,
6 ounces Zanzibar-Brand Chile Powder,
½ ounce Zanzibar-Brand Garlic Compound,
13 pounds Bull-Meat-Brand Flour,
Salt, to taste.

First.—Boil the beef trimmings and pork trimmings 10 minutes, in just enough water to cover the meat.

Second.—Grind the boiled meat fine and put it into a frying pan with the beef suet, lard or butter. Add 4 ounces of the Chile

Powder, the Garlic Compound and the salt. Braise about 10 minutes. Add a little hot water and thicken with 3 pounds of Bull-Meat-Brand Flour, until it has the consistency of thick paste.

Third.—Take the remaining 10 pounds Bull-Meat-Brand Flour, perhaps 2 tablespoonfuls salt, and the remaining 2 ounces of Zanzibar-Brand Chile Powder, and mix well. Rub in ¼ pound lard and enough of the water in which meat was cooked to make a stiff dough.

Fourth.—To prepare the corn husks, cut off about one inch of the thick ends and wash the remaining parts thoroughly. Then boil 10 or 15 minutes. Wipe them dry and cut them about 4½ inches long and 2 inches wide.

Fifth.—Spread the dough ⅛ to ¼ inch thick on one side of the corn husks. Then spread lengthwise at the middle 1½ to 2 tablespoonfuls of the prepared Chile-meat mixture. Roll up the husks and tie the ends with new twine.

Sixth.—Place the tamales in a steamer or double cooker and cook them gently for 30 minutes. They may be served hot or kept in a cool place and warmed as required.

Tamales may be made with any kind of meat. Chicken is used a great deal and makes very delightful tamales. As the correct flavor depends largely upon the Chile Powder used in making them, care should be taken to use only the best. Heller's Zanzibar-Brand Chile Powder has no equal for making Mexican and Spanish dishes.

HELLER'S ZANZIBAR-BRAND CHILE POWDER

Zanzibar-Brand Chile Powder is a chile condiment with various spices and aromatic flavors added to give it a piquant, zestful flavor. It is especially suitable for making Mexican and Spanish food specialties, such as Mexican chile con carne, tamales, enchiladas, Spanish and Mexican chorizos, chile loaves, Hungarian goulash, stews, gravies, etc. Chile experts and other competent judges pronounce it most excellent for these uses.

The formulas given herein have been thoroughly tested, and we submit them with full assurance that they will be found most satisfactory.

Chop Suey (American)

First.—Cut 6 pounds of fresh lean beef, or part beef and part pork, into ¼-inch slices and cut the slices into strips ½ inch wide and ¾ inch long.

Second.—Braise the meat in a frying pan with a little fat, until nicely browned.

Third.—Take the desired number of good-size stalks of celery and 5 pounds of onions, cut into small pieces and fry in pan until half cooked.

Fourth.—Add the braised meat and season with a sauce made as follows:

1 ounce Zanzibar-Brand Chile Powder,
2 ounces sugar,
4 ounces Worcestershire sauce,
½ pound Bull-Meat-Brand Flour,
1 pound water,
Salt, to taste.

Mix all ingredients together and heat until thick. Then mix with chop suey.

Fifth.—Heat all together 10 minutes and the chop suey is ready to serve. Mushrooms may be added if desired. This makes a very delicious chop suey.

Chinese Chop Suey

4 pounds fresh pork, cut ¼ inch thick, ½ inch wide and 1 inch long,
8 chicken livers, cut in ½-inch cubes,
8 chicken gizzards, cut in ½-inch cubes,
2 pounds celery,
1 pound mushrooms,
2 pounds chopped onions,
4 ounces salad oil, olive oil, peanut oil or butter,
2 ounces (or ¼ cupful) Worcestershire sauce,
½ teaspoonful Zanzibar-Brand Chile Powder,
Salt and white pepper, to taste,
2 ounces sugar.

First.—Braise the fresh pork, chicken livers and gizzards in a frying pan with the oil or butter until about half cooked.

Second.—Fry the onions, celery and mushrooms in oil until they are cooked. Put all ingredients together in a stew-pan and allow this to simmer for a few minutes, stirring constantly.

Third.—Add to one pint of water four bouillon cubes or, if desired, two tablespoonfuls of crushed or ground soy beans with caramel color.

The preceding formula can be made with veal, chicken, duck, goose or turkey, in place of pork, doubling the proportion of mushrooms.

Chile Con Carne

(For Restaurant or Home Use)

10 pounds boneless beef briskets or plates,
2½ pounds beef suet,
2 ounces Zanzibar-Brand Chile Powder,
2 ounces sugar,
10 quarts hot water,
3 pounds Bull-Meat-Brand Flour,
4 ounces salt.

First.—Chop the beef and beef suet into small pieces or put them through the ¼-inch-hole plate of a meat grinder.

Second.—After the meat is chopped it is a good plan to rub it over with a small portion of the Bull-Meat-Brand Flour before braising.

Third.—Braise the meat in an iron kettle or frying pan in fat until brown, being careful not to scorch it. Keep particles of meat separated by stirring while braising.

Fourth.—Add the Chile Powder, sugar and salt. Mix well, add the ten quarts of hot water, and cook slowly until the meat is tender.

Fifth.—Add Bull-Meat-Brand Flour: then bring to boiling point to thicken, whereupon the chile con carne will be ready to serve.

The above formula makes about 30 pounds of excellent chile con carne.

HOW TO PREPARE FRIJOLES, BAYOU OR KIDNEY BEANS

Wash the beans thoroughly in lukewarm water. Then put them into cold water, add a little baking soda, and let them stand over night. Next morning pour off the water and wash the beans again. Place them in cold water sufficient to cover them and boil slowly until tender.

When serving, mix about one-third beans and two-thirds chile con carne. The flavor of the beans and chile con carne is improved by adding a little sugar and boiling for ten minutes after the chile con carne and beans are mixed. In preparing this recipe the proportion of Chile Powder may be varied to suit different tastes.

Baked beans, with or without tomato sauce, are improved in flavor by adding a small quantity of Zanzibar-Brand Chile Powder, heating them thoroughly and serving while hot.

Chile Stew

20 pounds beefsteak,
2 pounds lard or tallow,
4 pounds onions,
3 pounds tomatoes,
2 pounds potatoes, chopped,
2 ounces sugar,
4 ounces Zanzibar-Brand Chile Powder,
½ ounce Zanzibar-Brand Garlic Compound,
4 ounces salt,
1 pound Bull-Meat-Brand Flour,
10 quarts water.

First.—Cut the beefsteak into ⅜-inch cubes or run it through the ⅜-inch-hole plate of the meat grinder. Fry it in lard or suet until brown.

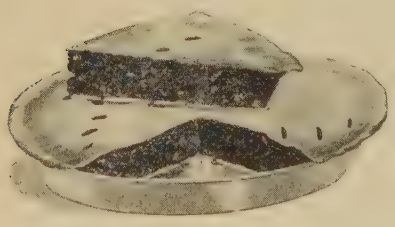
Second.—Chop the onions fine and fry them in the grease in which the meat was fried.

Third.—After the onions are medium fried, add the meat and all other ingredients. Cook this over a slow fire until well done.

Mince Meat

Formula No. 1

The following proportions will make excellent mince meat:



4 pounds lean beef,
8 pounds hard, green apples, cut into small cubes,
1 pound very finely chopped suet,
3 pounds seeded raisins,
2 pounds picked currants, carefully washed and dried,
2 to 5 pounds citron, cut into small pieces,
1 pound brown sugar,
1 pint cooking molasses (Pure New Orleans molasses is the best, and it must contain no glucose),
1 quart sweet cider,
1 tablespoonful salt,
1 teaspoonful ground black pepper,
1 teaspoonful mace,
1 teaspoonful allspice,
½ teaspoonful cinnamon,
A little grated nutmeg,
A pinch of cloves.

First.—Boil the beef until it is fairly well cooked and then chop or grind it very fine.

Second.—Add to the beef all other ingredients and mix thoroughly: then heat slowly on the stove and boil half an hour.

Third.—If the mince meat is to be put into sealed jars, put it in hot, using pint and quart jars, fill to the brim, and immediately screw the tops down tightly.

If the mince meat is to be kept in bulk and not put into jars, ¼ ounce Zanzibar-Brand Imitation Brandy Flavor should be added, after the mince meat has been cooked and allowed to become nearly cold, stirring the Brandy Flavor thoroughly. Then pack it into stone crocks, cover tightly, and keep in a very cool place where it will not freeze. This mince meat will keep all winter.

Mince Meat

Formula No. 2

The following directions will make the most delicious high-grade mince meat. It is the result of years of experience and effort.

5 pounds lean beef, chuck or round,
2 pounds seeded raisins,
2 pounds currants,
1 pound Sultana raisins,
½ pound mixed orange peel and lemon peel, candied,
1 quart cider,
1 pint New Orleans molasses,
¼ ounce Zanzibar-Brand Imitation Brandy Flavor,
10 pounds hard, green apples,
½ pound shelled almonds, blanched,
2 pounds beef kidney suet,
1 pound granulated sugar,
¾ ounce Zanzibar-Brand Cake Zest, Special Blend,
2½ ounces Zanzibar-Brand Pie Zest, Special Blend,
½ pound citron,
2 tablespoonfuls salt.

First.—Boil the lean beef one hour and a half and save the liquor or soup. Chop the beef into fine pieces.

Second.—Separate the seeded raisins. Wash the currants in two changes of warm water, and soak them about one-half hour: then drain them thoroughly. Cut the mixed peel and citron into small pieces. Peel and core the apples and boil them one hour. Strain and set the liquid aside. Scald the almonds, blanch (remove the skins), and chop into fine pieces.

Third.—When the above is prepared, place the ingredients in a large cooking kettle. Add the cider and the soup in which the meat and apples were cooked; also add the pint New Orleans molasses and

all the other ingredients, except the kidney suet. Cook these slowly about one hour until evaporated to the right consistency. Cool the mixtures to about 200 degrees F.

Fourth.—Chop the suet fine, adding a little Bull-Meat-Brand Flour, which will prevent it from sticking to the knife. It is essential to have the suet ice cold and free of moisture when chopping: this will cause it to chop much easier and cleaner and will prevent a pasty condition.

Fifth.—Then add the suet to the mixture of mince meat, with about two tablespoonfuls of salt and the Brandy Flavor. Mix together thoroughly and bring to the boiling point for a few seconds: then place in jars and seal. If the mince meat is to be kept for a long time, cut paraffin paper discs to fit over the top of the contents, saturate same with Brandy Flavor, place the top on and seal tightly. Keep in a cool place. The moisture can be increased, when necessary, by adding more cider.

The cost of this product may be lessened by adding more apples and moisture, but we do not deem it advisable.

The quantities can be varied according to the quantity of mince meat desired at one time.

Mince Meat

Formula No. 3

The following directions will make a most pleasing mince meat.

20 pounds lean beef, boiled until it is fairly well cooked, then chopped or ground very fine,
40 pounds hard green apples, cut into small cubes,
5 pounds suet, chopped very fine, or cracklings from rendered beef or pork fat,
15 pounds seeded raisins,
15 pounds picked seedless currants, carefully washed and dried,
25 pounds citron, cut into small pieces,
20 pounds brown sugar,
8 pounds Bull-Meat-Brand Flour,
1 gallon cooking molasses (pure New Orleans molasses is best and it must contain no glucose),
1 gallon sweet cider,
2 pounds salt,
6 ounces ground black pepper,
2 ounces mace,
¾ pound allspice,
½ pound cinnamon,
2 ounces grated nutmeg,
1 ounce cloves.

Mix the above thoroughly: then heat it slowly in a steam-jacketed kettle or on the stove and boil it one-half hour.

If the mince meat is to be put into jars, pour it while hot into pint or quart jars, as desired. Fill them to the brim and immediately screw down the tops tightly.

If the mince meat is to be kept in bulk, add 1½ ounces Zanzibar-Brand Imitation Brandy Flavor, after the mince meat is cooked and allowed to become barely cold, thoroughly stirring the Brandy Flavor into it. Then pack it in stone crocks, cover them tightly and keep them in a cool place where the mince meat will not freeze. It will keep all winter.

Concentrated Mince Meat

Dry or concentrated mince meat is made in the same manner as above, except that dried apples are used instead of fresh apples, and no liquids are added.

The following is a formula for a good grade of concentrated mince meat at a moderate cost.

50 pounds beef hearts, cooked and then finely ground,
25 pounds cracklings, from rendering either beef or pork fat, finely ground,
100 pounds common brown sugar,
200 pounds ground, dried apples,
25 pounds seedless currants, picked clean,
25 pounds seeded raisins,
24 pounds Bull-Meat-Brand Flour,
1 pound powdered cinnamon,
½ pound powdered cloves,
½ pound mace,
2 pounds allspice,
1 pound black pepper,
9 pounds salt.

Place the above in a mixing machine and mix well: then put through a meat cutter or grinder.

This makes an excellent and cheap dry mince meat. It should be kept covered in stone jars or packed in cartons lined with paraffin paper. When it is used, water or cider should be added to give it the proper consistency, as it is too dry and concentrated for use in its original form.

Curing Cucumber Pickles

For Sour Pickles and Sweet Pickles

First.—Select sound green cucumbers, not more than 24 hours from the vines, having ⅛ inch of stem left on. Wash off all soil and foreign matter.

Second.—Make a 38-degree salt brine by salimeter test, which is equal to 13½ ounces of salt dissolved in one gallon of water. Add one pound Freeze-Em-Pickle and one quart good vinegar to each 25 gallons of the salt brine and dissolve it completely. The vinegar neutralizes the alkali in hard water.

Third.—Provide water-tight containers, crocks, barrels, tierces or vats. Put 5 or 6 inches of the brine mixture into each. As the cucumbers are gathered or received, put them into the brine. After each addition, cover with a loose board and weight it down with stone, heavy enough to raise the level of the brine over the top of the board, and place on the board a pound of salt for every 10 pounds of cucumbers just added. This salt restores the strength of the brine as the water pressed out of the cucumbers dilutes it.

If the container is filled all at one time, there will not be brine enough in it to cover. In that case, more of the 38-degree brine mixture must be poured on to cover the board when the stone weight is in place. The cucumbers must be kept entirely under brine.

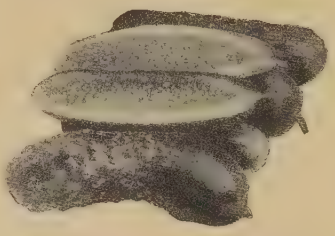
Fourth.—When the barrel is full, the cucumbers properly weighted down, and the brine mixture sufficient to cover all, place on the board 3 pounds salt for a full barrel. Do not stir or agitate. Repeat weekly for 5 weeks, at which time the brine will test about 60 degrees on the salimeter. From time to time, remove the scum which forms on top as a result of the fermentation.

If the brine were made stronger than 38 or 40 degrees at the start, fermentation would be checked. Adding the salt in weekly portions, keeps up the necessary strength for curing as the brine is diluted by the moisture pressed out of the cucumbers. The strength of brine does not materially increase until the fermentation is completed. At 60 degrees on the salimeter, if the cucumbers are not exposed to air

and the scum is kept removed, they will be plump and firm and will have a translucent, olive-green color in all parts in about 45 to 60 days. Those are the marks of a perfect cure and the cucumbers are then ready for sour pickles or sweet pickles.

Pickles are cured at a much higher temperature than meats. 86 degrees F. is ideal, but ordinary room temperature will do very well.

Sour Cucumber Pickles



First.—Take cucumbers cured in the manner described above, and process them to remove excess salt. Do this by covering them with water in a tank or other vessel, heat them slowly with live steam or by other means to 120 degrees F., and hold them at that from 10 to 12 hours, stirring from time to time. Then pour off the water. They are **then suitable for use as salt pickles.** For sour pickles or sweet pickles, there should be only a mild taste of salt. If necessary, process again until the right degree of saltiness is reached. Do not remove all taste of salt, as they will then have inferior keeping quality. It is during the heating process that some add 2 ounces of alum to the 45-gallon barrel to harden the pickles. But if the curing is properly done, they will be firm and crisp without such addition.

Second.—Without delay, sort the cured and processed cucumber pickles into four sizes, as follows:

Gherkins, 1 to 2 inches long,
Small, 2 to 3 inches long,
Medium, 3 to 4 inches long,
Large, 4 inches or longer.

Pack the small size in wide-neck bottles or mason jars, keep the gherkins and medium for making sweet pickles, and pack the large into crocks, kegs and barrels for bulk sour pickles. Use the misshapen in mixed pickles, piccalilli and the like.

Third.—As soon as the cured and processed pickles have been sorted and well drained, cover those intended for sour pickles with 45-degree vinegar. In a few weeks, pour off the weakened vinegar and cover again with vinegar of the desired strength. This is necessary to prevent spoiling. If a 45-degree vinegar does not make the pickles sour enough to suit the trade, use as strong a vinegar as the trade demands; but always start with 45-degree vinegar and change to the stronger after a week or 10 days.

Sweet Cucumber Pickles

First.—Cure small to medium cucumbers as described on page 342.

Second.—Process them as for sour pickles.

Third.—Cover the cured and processed cucumbers with 45 to 50-grain vinegar. Pour it off in seven days, when it will have become much weakened.

Fourth.—Make a liquor in the following proportions, making enough to cover the pickles:

4 pounds granulated sugar,
¼ ounce whole mixed spices, avoiding peppers and cloves,
1 gallon 45 to 50-grain vinegar.

Put the spices into a cheese-cloth bag and boil them in the vinegar not longer than 20 to 30 minutes, then remove the spices, add the sugar, stir till dissolved and, when cooled to 120 degrees F. or lower, pour the sirup over the pickles.

Fifth.—During the next week or two gradually add additional 2 pounds of granulated sugar for each gallon of vinegar sirup on the pickles. This makes a total of 6 pounds sugar for each gallon of vinegar and should test about 42 degrees on a Brix or Balling sugar hydrometer. If a sweeter or less sweet pickle is desired the proportion of sugar may be varied accordingly; but never put more than 4 pounds of sugar to the gallon of vinegar as poured over the pickles; add whatever further sugar is desired during the two weeks following.

Keep the acidity of the liquor above 30-grain to prevent fermentation and spoiling.

Handled in this way sweet pickles should not shrivel or become tough; they should have excellent keeping quality, no matter if packed in jars and bottles or sold in bulk.

Dill Pickles

Dill pickles are sold directly out of the brine in which they were cured. A much weaker brine is used than in curing for sweet or sour pickles, and the keeping quality of dill pickles is therefore much lower. However, there is less work in putting them up and only half the time is needed: consequently dill pickles are a profitable item for

the busy butcher to put up. The use of Zanzibar-Brand Pure Spices will enable him to produce an article that will draw new trade.

First.—Take medium to large cucumbers, not more than 24 hours from the vines, with stems of ⅛ inch, and wash them clean.

Second.—Weigh off the dill needed for the quantity of pickles to be cured. If the dill is either green or put up in brine, use about 7 pounds to the barrel (45 gallons) of pickles. If the dill is dried use about 3½ pounds to the barrel. Divide the dill intended for each container into three equal parts, to be spread at the bottom, the middle and the top of each container.

Third.—Measure off (or weigh) the spices needed for the quantity of pickles to be cured. Use mixed spices to suit local taste, but omit peppers, cloves and similar strong spices. About a quart (or 1 to 1¼ pounds) to the barrel is needed. Divide the spices intended for each container into three equal parts, to be spread with the dill at the bottom, the middle and the top of each container. If a straight dill flavor is desired the spices may be omitted.

Fourth.—Barrels and kegs are most convenient for pickling. Vinegar barrels are very good. Spread a layer of grape leaves in the bottom and over these one of the three portions of dill and spices, then fill the container half full of pickles without bruising them. Spread a second portion of the dill and spices and then fill the container with pickles. Then spread the third portion of dill and spices, and top off with another layer of grape leaves. The grape leaves tend to green the pickles and make the prohibited process of greening with hot vinegar in copper kettles unnecessary. Head up tightly, making sure to bore a hole in the head before putting it in place. If brined dill was used pour in 2 quarts of the dill brine through the hole left in the head of the barrel.

Fifth.—Make a brine in any quantity needed, using the following proportions:

12 pounds salt,
1 pound Freeze-Em-Pickle,
9 pints 45 to 50-grain vinegar,
25 gallons water.

Completely dissolve the salt and Freeze-Em-Pickle and pour enough of the brine through the hole in the head of the barrel or keg to fill it

completely to overflowing. Look at it daily and add more brine to maintain that level. This is important, as the pickles must not be uncovered and exposed to air. Though 86 degrees F. is the ideal temperature for this fermentation, the container may be kept at a convenient room temperature. Leave the hole in the head open for the escape of the gas and remove the scum from the top daily. When the frothing or bubbling has stopped completely, make sure the container is completely filled with brine and bung it up tightly. It will then have good keeping quality if held in a cool place. The vinegar is included to improve the keeping quality. There is not enough of it to affect the fermentation: still it can be omitted if preferred.

If the dill pickles are to keep 6 months to a year, the proportion of salt in the above formula should be increased to 15 pounds.

Yellow Cucumber Pickles

First.—Secure the largest and thickest cucumbers that can be had. Carefully peel and scrape out the center pulp containing the seeds. The skin should be removed as thinly as possible, avoiding waste of the cucumbers.

Second.—Cut the peeled and scraped cucumbers lengthwise into quarters and then once across the middle, making eight pieces of one large cucumber. If the cucumbers are small, cut them into three pieces and once across the middle, making six pieces of each.

Third.—Make a mixture of salt and Freeze-Em-Pickle, at the rate of 1 pound of Freeze-Em-Pickle to each 100 pounds of salt, or 1 ounce Freeze-Em-Pickle to each 6¼ pounds of salt. Mix them thoroughly.

Fourth.—Place a layer of the cut cucumbers in the bottom of a large kettle. Sprinkle salt mixture over this layer, add another layer of cucumbers and salt mixture, and continue until the kettle is nearly full.

Fifth.—Allow the salted cucumbers to stand over night. In the morning they will be found covered with water, which should be poured off and each pickle dried separately with a clean towel.

Sixth.—While drying the pickles, prepare a syrup in which they are to be cooked. Take the following ingredients:

1 pound granulated sugar,
1 quart 60-grain white wine vinegar,
1 pint water,
2 tablespoonfuls mustard seed,
2 ounces cinnamon,
½ ounce whole cloves.

Seventh.—Take the sugar, vinegar, water and mustard seed and place them in a kettle on the stove. Place the whole cloves and cinnamon in a small bag, tying tightly: then put the bag of spice into the liquid mixture and bring all to boiling.

Eighth.—After the syrup has been brought to boiling point, add a sufficient quantity of pickles to fill an ordinary mason jar. Let the pickles boil a couple of minutes, but watch them continuously, as they must not become soft or mushy.

Ninth.—Place a pinch of powdered alum in the bottom of the jar and fill with the boiled pickles: then pour into the jar enough of the liquid the pickles were cooked in to fill it to the brim.

Tenth.—Seal the jar at once while the pickles are hot. After the jar is tightly closed, turn it upside down and keep it in this position 24 hours. Should there be any signs of a leak this will disclose it.

IMPORTANT.—Never touch the pickles with any metals other than a silver fork, otherwise they will turn black.

The pickles should be boiled only in such quantities as will fill a mason jar at a time. The sirup for cooking can be made as often as necessary. It will be found that some pickles are thicker than others and that the thin will cook quicker than the thick. The thin ones should be removed and put into jars as soon as they are cooked, leaving the thick ones in the sirup until they are done. In using the sugar it should be borne in mind that it is purely a question of taste and, while one pound is generally used, it may be advisable to use more. It is best to test the boiling liquid to see that it is sufficiently sweet.

Olives

To retain the flavor and keep olives at their best requires some little attention to detail. Bulk olives are supplied to retail dealers in one-gallon to five-gallon kits, five to thirty-gallon kegs, and in barrels.

In packing olives, just enough brine mixture should be added to cover them. If the keg has leaked in transit, or after being received by the dealer, and some of the olives are above the brine uncovered, they will in a short time become darker in color and the flavor will become impaired or ruined. Uncovered or partly spoiled olives should be removed at once, for if allowed to remain they will taint the rest of the olives.

Make a brine by dissolving 7 ounces of salt in each gallon of

water. To each 25 gallons of the brine add 1 pound Freeze-Em-Pickle and dissolve it completely.

Cover the olives with this brine and add more as needed from time to time to keep them well covered with the brine mixture. Keep the cover on the kit, keg or barrel to exclude the air as much as possible.

A white scum sometimes forms over the top of the brine; this is natural and of no particular significance. Should this scum become brown or black, it indicates decomposition has set in and that the olives have become impaired or the flavor injured. They should be removed from the brine and thoroughly rinsed two or three times with clean cold water and again covered with brine mixture. The brine should always cover the olives. Before repacking them the container should be thoroughly cleaned by washing with boiling water and Ozo Washing Powder, rinsing well.

Horseradish

Home-made horseradish is a relish that every household demands. It is impracticable to put grated horseradish upon the market except when bottled, as exposure to the air discolors it and dries it. An excellent bottled article which will prove a good keeper as well as a good seller may be made as follows. To ten parts grated horseradish add one part granulated sugar and one part pure vinegar. In preparing horseradish, none but white vinegar should be used. One of the best means of getting new trade for the meat market is to sell home-made grated horseradish.

Pimentos and Red Peppers

How to Preserve and Keep Them

Take off the stem, cut the pimentos or peppers open, and remove the pulp and seeds. Put them into hot water five minutes to soften and swell them. Then place in 75-degree brine, add 1 pound of Freeze-Em-Pickle to each 25 gallons of brine. Pimentos and peppers so put up will remain nice and firm and keep in excellent shape for many months, especially if kept in an ordinary cold storage room at a temperature of about 40 degrees.

Chow-Chow

Chow-chow is a popular relish, readily prepared. It is strictly a Chinese innovation which was introduced to the American palate during the first immigration of the Chinese. Chow-Chow keeps well and is a good seller, but in order to retain its color and flavor it should be carefully covered and kept from exposure to the air.

The following are the directions for making a delicious chow-chow:

15 heads (the ripe, white curds) fresh cauliflower,
½ bushel fresh onions,
1 peck green string beans,
1 bushel green tomatoes,
1 bushel large sound green pickles,
1 peck green peppers,
2 pounds salt.

Cut the vegetables into small pieces and salt them with the two pounds of salt. Let them stand over night and then mix in chow-chow sauce.

Chow-Chow Sauce

2 pounds mustard flour,
6 ounces turmeric,
.6 pounds granulated sugar,
15 pounds Bull-Meat-Brand Flour,
2 pounds salt,
¼ pound Zanzibar-Brand Chile Powder,
¼ pound Zanzibar-Brand Garlic Compound,
10 gallons 45-grain vinegar,
1 ounce alum.

First.—Mix the mustard flour, sugar, and all dry ingredients together.

Second.—Break all lumps and make a smooth paste by slowly adding the vinegar while stirring. Should it contain lumps after mixing, run the mixture through a screen so as to reduce them. However, with care in adding the vinegar, it can be mixed so that no lumps will form.

Third.—Then heat the entire mixture of flour, spice and vinegar until it is a heavy paste.

Fourth.—Pour the hot paste over the salted vegetables and mix well together so that the sauce may reach all parts of the pickle mixture.

Piccalilli

This relish is easily prepared and is in considerable demand in some localities. The following formula makes an excellent piccalilli:

1 bushel green tomatoes,
½ peck green peppers,
½ peck onions,
3 heads medium size cabbage,
2 pounds whole mustard seed,
½ pound powdered turmeric,
5 pounds granulated sugar,
2 ounces ground red pepper,
¼ ounce ground cloves,
1 ounce broken cinnamon,
1 ounce whole cassia buds,
4 ounces whole celery seed,
2 gallons white vinegar, 45-grain.

First.—Use only sound, firm, green tomatoes. Wash them thoroughly and cut away all defective portions.

Second.—Slice or quarter the tomatoes and peppers; slice the onions and cabbage.

Third.—Place all in a salt brine made with 1 pound salt to each gallon of water, making enough brine to cover all. Let them cure in this brine for two weeks or longer.

Fourth.—At the end of the curing process, remove the mixture from the brine and chop very fine, or run it through the ¼ or ⅜-inch-hole plate of a meat grinder.

Fifth.—After chopping or grinding, add all other ingredients and mix well.

Sixth.—Then add 1 ounce of alum dissolved in 2 gallons of 45-grain white wine vinegar; mix this with the piccalilli, place it on the fire, and bring it to boiling point, stirring continually. Boil a few minutes.

The piccalilli will then be ready for use after it has cooled.

Sauerkraut

First.—Select sound cabbage and peel off the outer soiled or damaged leaves, quarter the heads to cut out the cores, and then slice or shave it with a cabbage cutter as finely as possible. It is necessary in making first-class sauerkraut to obtain a perfect fermentation under pressure with the aid of salt mixture alone. The brine should result from the

water extracted from the cabbage by the salt mixture, no water being added.

Second.—Prepare a mixture of salt and Freeze-Em-Pickle in the proportion of 1 pound of Freeze-Em-Pickle to each 100 pounds of salt, or 1 ounce Freeze-Em-Pickle to each 6¼ pounds salt.

Third.—Secure a good, strong cask, keg or crock, which should be well scalded and cleaned. Sprinkle on the bottom of the cask a small quantity of salt mixture; then put in a layer of sliced cabbage and, while adding the cabbage, sprinkle some salt mixture through it, so that the salt mixture is as evenly distributed as possible: then tamp well with a wooden tamper so as to pack it tight and firm.

Fourth.—Continue putting in layers of sliced cabbage and tamping until the barrel is full. The salt mixture to be used should always be of the best grade. Two and one-quarter pounds of salt mixture to 100 pounds of cabbage is the proportion best adapted to permit the growth of the desirable kind of bacteria while inhibiting or preventing the growth of the undesirable kinds.

Fifth.—After the cask is filled, or is as full as desired, the cabbage should be covered with a clean cloth on which should be laid hardwood boards. The head of a cider barrel or tierce makes the best cover, because it fits the barrel, is of hard wood, and will not impart a wood taste to the cabbage. Weight down the boards with heavy stones, always remembering that the fermentation must be accomplished under pressure.

Sixth.—Until the fermentation is completed, keep it at ordinary living-room temperature. Once a week remove the stones, boards and cloth from the kraut, washing them clean and replacing them. This washing keeps the top of the kraut sweet and, at the same time, removes the foam which comes to the top, so that the kraut at the top of the barrel will be as good as that in the bottom.

Seventh.—When the fermentation is completed and all scum and froth removed from the top, move the barrel to as cold a temperature as possible without freezing. In commercial practice, where large quantities warrant the extra expense, the completely fermented kraut may be pasteurized or heated till it reaches a temperature of 160 degrees at the center of the barrel. In that way it should keep perfectly till consumed. But the kraut must be kept covered with its brine.

The flavor of sauerkraut may be improved by adding to the above formula a layer of thin sliced apples to each layer of kraut as it is packed in the barrels. Sometimes a layer of grape leaves is spread on top of the kraut: this helps mature it and also adds to the flavor. Caraway seeds sprinkled over the kraut when packed is also good, but not as well liked as the apple flavor. The juice of the kraut distributes the flavor throughout the barrel.

NOTE.—If one has a large stock of kraut in warehouse and the weather is so cold that the kraut does not ripen, it should be handled as follows.

Make a weak solution of lactic acid and repack the kraut, mixing the solution in as the kraut is rehandled. The quantity of lactic acid to use will depend upon the acidity desired, usually just enough to give it a slight acid taste, say about a 1 per cent solution. The lactic ferment will soon start working in the kraut and ripen it. Lactic acid is derived from milk and is perfectly wholesome.

How to Make Potato Chips

(Saratoga Chips)

Potato chips can be handled very nicely in connection with meat, and very often customers who never think of potato chips would buy them if they saw them in the markets when buying their meats. Make potato chips as follows.

First.—Peel the potatoes and then thoroughly wash them in clean, cold water.

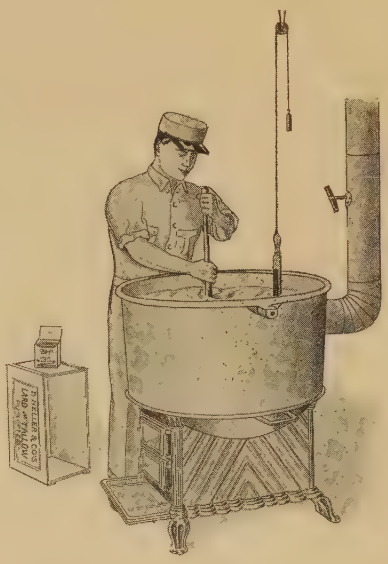
Second.—Put the potatoes into a slicing machine and slice them. These machines are inexpensive and are sold by all hotel supply people, as hotels use them. They can also be obtained from the large hardware dealers.

Third.—Cook the potato chips in cottonseed oil. Heat the oil until it is boiling hot, and then put the slices into it. As soon as they are done, take them out with a skimmer and place them in a large sieve over a pan so as to catch the drippings.

Fourth.—When they have stopped dripping, place them in a tub or barrel and, while still hot, sprinkle enough salt over them to give the proper taste.

Potato chips may also be made with pure lard, but cottonseed oil is cheaper and the public seems to like it better.

Rendering Lard, Butcher Shop Practice



One of the things much neglected in many butcher shops is the making of lard. Butchers who do not cut up enough hogs to have fat for making lard each day, allow the fat to accumulate until they have a sufficient quantity to make the rendering worth while. Many butchers do not keep this fat in the ice box, but let it stand anywhere because they imagine that it does not spoil: then, when they make lard out of it, they wonder why the lard is not better.

The fat trimmings should be kept in the cooler and made into lard as quickly as possible. Do not allow them to remain lying around in a warm place. To make high-grade kettle-rendered lard, always cut the rinds off the fat. The rinds can be put into pickle or dry salted and stored until a quantity has accumulated, and then they can be cooked and utilized in liver sausage, headcheese, blood sausage, etc. When the rind is cooked with the lard it always causes more or less detriment to the color of lard, but the flavor is improved by using a small quantity.

The simple, hand stirred kettle is not profitable above 150 gallons capacity. An agitator is needed above that.

Before rendering, if one has the machinery, the fat should be put through a regular fat hasher or meat grinder, and ground into small pieces. The smaller it is ground the better, for if the fatty tissues are thoroughly mangled and disintegrated the lard will separate more readily when the heat is applied. Those butchers who have no machine in which to cut the fat should cut it into small pieces by hand.

For making kettle-rendered lard a steam jacket kettle is the best, but if one has no steam a common caldron will answer. Great care must be taken not to scorch the lard by allowing it to become too hot or by leaving it in the kettle too long when a caldron is used.

Rendering Lard in a Jacket-Kettle or Caldron

Before putting the fat into the kettle, put in a gallon of water for every 100 pounds of fat, as the water prevents the lard from scorching. Then put in all the fat that is to be rendered and start the fire or slowly turn on the steam, as the case may be.

In rendering lard, the heat should be brought up gradually, so that quite a little of the fat is melted before the full heat is applied. If the heat is brought up too rapidly, it will cause the lard to be darker in color than when it is gradually heated.

Lard should be boiled about 1½ hours after the entire mass is boiling.

To render lard with precision, a thermometer is hung in the lard and the temperature brought gradually up to 255 or 260 degrees F., and then the steam is turned off or the fire is checked, as the case may be, and the lard allowed to cook slowly until it is finished.

A butcher can always tell when the lard has cooked sufficiently by the way the cracklings press out.

After the lard has been tried out, skim off all the cracklings, put them into a press and press out all the lard, adding what is pressed out to that in the kettle.

Then the lard is ready to be strained through a piece of cheesecloth.

How to Purify Lard While Rendering, With Only a Common Rendering Kettle

The kettle must not be too full of lard: it should not be more than one-half full when being treated with the Purifier. After the lard has been rendered as directed, treat it as follows.

First.—Test the temperature of the lard with a thermometer. Should it be over 200 degrees F., do not add the Lard Purifier and water, but let the lard stand for half an hour or so, until the temperature falls below 200 degrees. Then add to each 100 pounds of lard 3 ounces of B. Heller & Co's Lard Purifier, dissolved in 1 quart of water. For example, if the kettle contains 400 pounds of rendered lard, add 12 ounces of Lard Purifier dissolved in 4 quarts or 1 gallon of water.

Caution.—If the Lard Purifier and water are added to the lard when the temperature is at the boiling point of water (212 degrees at the altitude of Chicago), the water is at once converted into steam and the lard will foam and boil over; but, when the lard is below 200 degrees, this will not happen.

Second.—After adding the Lard Purifier and water, take a paddle and stir the lard thoroughly, so that the Lard Purifier may be mixed throughout the lard; the more it is stirred, the better.

Third.—Then turn on the steam slowly or build up the fire, as the case may be, and heat the lard to 212 degrees (for Chicago). The moment 212 degrees F. is reached (or whatever the local boiling point may be) the lard will begin to foam. When it reaches this point it should not be left for a moment, because if it gets too hot it will boil over the top of the kettle; but if one stays right with it and checks the fire when the lard begins to foam, it will not boil over, but will foam a little and most of the impurities will rise to the top.

NOTE.—For every 550 feet above the altitude of Chicago, the boiling point is 1 degree lower than 212 degrees F.

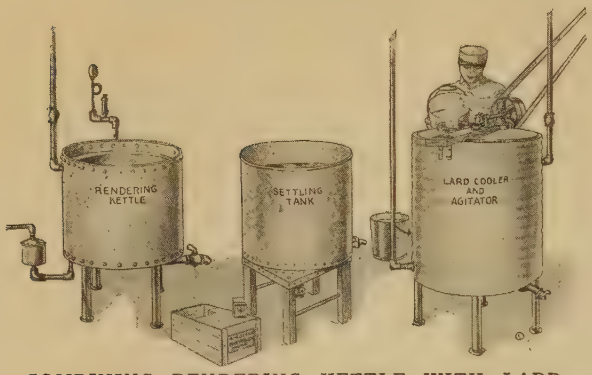
Fourth.—Now remove the fire, skim off all impurities that are on top, and allow the lard to settle for about two hours, when all the water and the smaller impurities that did not rise to the top will have separated from the lard and will be at the bottom. It is surprising what a lot of impurities will thus be separated from the lard.

Fifth.—If the kettle has a faucet at the bottom, draw off the water and the impurities which have settled, and then run off the lard.

Should the kettle not have an opening at the bottom, dip out any of the water which is on the bottom after most of the lard has been taken out. That lard which remains near the water can be dipped out together with the water and poured into a bucket or tub (over which a cheese cloth has been stretched) and allowed to harden. The lard that is in the bucket with the settling water will float on top and when hard can easily be taken off the top of the water. It should be kept until the next batch of lard is rendered, when it can be re-melted.

Sixth.—Always remember that, before running the lard into buckets, it is well to put it through a piece of cheese cloth, so as to remove any small pieces of detached cracklings. It is also advisable to put the lard into the ice box as soon as it is run into buckets that it may congeal or set. This will prevent the separation of the oil from the lard stearin.

If a Lard Settling Tank and Agitator Are Used, Handle the Lard as Follows



COMBINING RENDERING KETTLE WITH LARD SETTLING TANK AND AGITATOR

A packer or butcher who makes a considerable quantity of kettle rendered lard, should have a rendering kettle in which it is rendered, a settling tank in which the impurities are settled out, and a lard cooler with an agitator in it. The lard cooler and agitator should be double or jacketed so that cold water may be run into the jacket to cool the lard.

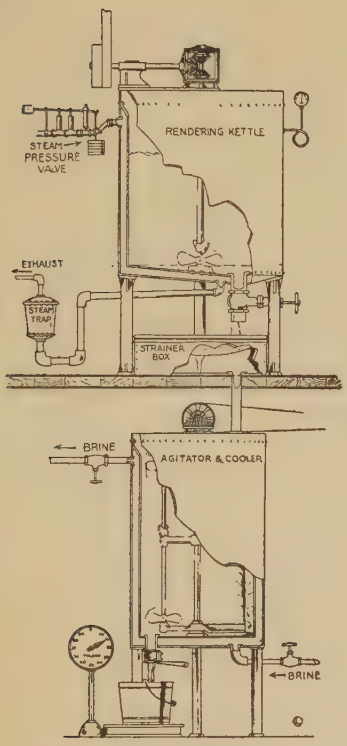
When equipping a plant with a settling tank and cooler, we advise that the settling tank have two faucets, one at the extreme bottom and the other about 1 inch from the bottom. Then, when the water is drawn from the settling tank, the lower faucet should be used: when the lard is drawn off into the agitator the upper faucet, which is an inch from the bottom, should be used. In this way small particles which may be in the lard will remain in the 1-inch layer of lard which remains in the bottom of the settling tank. After all the lard is run off through the upper faucet, what remains between the upper faucet and the bottom of the settling tank should be drawn off through the lower faucet; this should be kept until the next time lard is rendered and then should be remelted with the next batch.

After the lard has been rendered and has been treated in the rendering kettle with the Lard Purifier, as directed on page 354, strain it through a cheese cloth into the settling tank, allow it to settle for two hours, then draw off all the water from the bottom faucet. After the water has been drawn off, draw off the lard from the top faucet and again run it through cheese cloth, into the cooler and agitator. Start the agitator and allow it to run until the lard is thick and white, like cream: then run it off into buckets or tubs.

A good way to set up the settling tank, cooler and agitator, is to have the settling tank high enough up, on a bench above the agitator, so that the lard may be run out of the settling tank into the agitator by gravity. The cooler and agitator should in turn be high enough above the floor that the lard may be run from it into buckets or tubs.

The right apparatus, properly rigged up, is a good investment. It pays for itself in facilitating the work and insuring correct methods.

If You Have No Settling Tank, But Simply a Rendering Kettle and an Agitator, Handle the Lard as Follows



RENDERING KETTLE AND AGITATOR

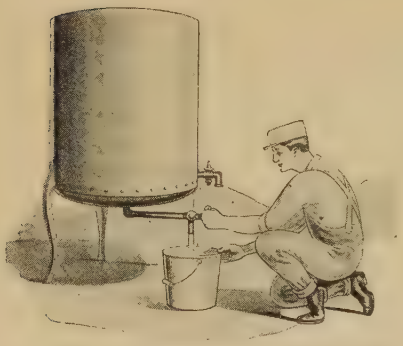
First.—Render the lard in the rendering kettle and treat it with B. Heller & Co's Lard Purifier, as directed on page 354.

Second.—After it is treated, put the lard through two or three thicknesses of cheese cloth into the agitator.

Third.—Allow it to settle in the agitator for two hours; then run off all the water from the bottom and start the agitator. The lard should be agitated until it is thick like cream: it is then ready to run off.

We recommend, however, that lard be taken from the rendering kettle, put into a settling tank, allowed to settle, and then run from the settling tank through the faucet into the lard cooler. While in the cooler it should be agitated until it becomes thick. There are always small particles of charred tissue to settle in the bottom of the settling tank, which cannot be gotten out in any other way. The lard will be whiter and purer if allowed to settle in a settling tank and then drawn off into the cooler.

If You Have a Lard Settling Tank Without Agitator, Handle the Lard as Follows



LARD SETTLING TANK WITHOUT AGITATOR

First.—After treating the lard with Lard Purifier and water, as directed on page 354, until it foams and the foam has been skimmed off, dip the lard and water out of the kettle and run it through a piece of cheese cloth into the settling tank.

A settling tank without agitator is simply a galvanized iron tank with a large faucet at the bottom. The bottom can be made to incline to the center and the faucet placed at the lowest point, that all the water may be drained off, or the bottom can be made level with the faucet close to the bottom, and the tank set slanting so that the water or lard may all drain out.

Second.—After the lard is in the settling tank, let it settle for one or two hours, according to the size of the tank and quantity of lard in it. Then drain off the water and impurities which have settled to the bottom. After these are drawn off, the lard is ready to be run into buckets, which should be placed in the ice box to cool.

A better way is to let the lard settle in the settling tank and, after the water is drawn off, stir the lard with a large paddle until it is thick and creamy, then run it into buckets. By this method lard will have a much lighter color when cold than lard that is run into buckets hot.

How to Purify Rendered Lard

First.—Put 100 pounds of water into the lard kettle and add to it ¼ to ½ pound of B. Heller & Co's Lard Purifier: then, on top of the water, put 100 pounds of the rendered lard.

Second.—If a steam kettle is used, turn on the steam: if the kettle is heated by fire, start the fire. The heat should be applied slowly and must be closely watched, so that the lard may not get too hot and boil over. In no case should more lard and water be put into the kettle than to fill it one-half full. Having the kettle only half full, it leaves plenty of room for the lard to boil and foam and prevents it from boiling over.

Third.—While the lard is being heated, stay right with it at the kettle to watch it and continually stir it. The more it is stirred, the better the lard will be washed and purified.

Fourth.—When the lard begins to boil, check the fire and let it simmer from 10 to 15 minutes, stirring it as much as possible. Then put out the fire or turn off the steam and let the lard settle for about two hours. Carefully skim off all the impurities that come to the top.

Fifth.—After the lard has settled for two hours, all the water will be at the bottom. If the kettle is provided with a faucet at the bottom, let the water run out slowly until it is completely drained off. If the kettle has no opening in the bottom, dip the lard from the top of the water and pour the lard into a lard cooler. If you have a lard cooler with an agitator, start the agitator and keep it running until the lard gets thick like cream; it is then ready to be drawn into buckets. If you have no regular agitator, it is necessary to stir the lard with a suitable wooden paddle occasionally until it gets thick and creamy; then run it into buckets.

Lard Not Purified

If lard is made without taking out the impurities with water and our Lard Purifier, it will become rancid during the hot weather. It will be neither as sweet in flavor nor as clean and white as when treated with Lard Purifier according to the preceding directions. Our Lard Purifier neutralizes the free, fatty acids in the lard, thus to a considerable extent preventing rancidity, keeping the lard sweet and palatable.

Lard made with our Lard Purifier according to the foregoing directions will comply with regulations under the various pure food laws.

Crinkly-Top Lard

A great many consumers of open kettle rendered lard demand it in small packages, such as 3-pound and 5-pound pails, and in most cases they ask for crinkly-top lard.

There are many ways of making crinkly-top lard, but the lard maker has considerable trouble in producing a crinkly top on each batch he makes. Some start electric fans blowing on the top of the lard when it is about to set. This method works all right sometimes, but not always.

The best method is to run the lard hot into the tin cans and put them into a cooler or freezer without the top on the pails until cold

or set. If lard pails filled with hot lard have the covers on when placed in the cooler, the tin pails will sweat and drops of moisture will form under the tin covers. This method causes fine crinkly tops. If one has no cooler or freezer, the only way to do is to use an electric fan to blow on the top of the cans at a slight angle.

Compound Lard

(In the Butcher Shop)

In the southern states, where the climate is warm, it is necessary to add tallow or tallow stearin or lard stearin to lard, so as to congeal or stiffen it in order that it may be handled at all.

To make compound lard, first render the lard and press out the cracklings as directed; then add from 10 to 20 per cent. of tallow or tallow stearin or lard stearin, and stir until it is all melted and thoroughly mixed with the lard. The quantity of tallow or stearin to add depends upon the climate and season of the year, also on the price of the different materials. On the whole, a larger proportion of tallow or stearin is required in warm weather or warmer regions than in cool. Equal parts of tallow, lard and oil make a good compound for average conditions.

After adding the above, purify the mixture in the same manner as directed for handling pure lard. However, compound lard must always be agitated until it is thick and cream-like before it is run into buckets. If one has no power lard agitator, it must be stirred by hand until it is cool and congealed or stiff.

It is perfectly legal to add tallow, tallow stearin or lard stearin to lard for this purpose, but such lard must be labeled and sold as compound lard. It cannot be sold as pure lard when these ingredients are added to it.

How to Render Tallow White, Odorless, Flaky, and Soft, Like Lard in Texture

It is an easy matter to render tallow so as to have it of a very light color, in fact almost white, and at the same time flaky and soft like lard, if the instructions which follow are carried out. When so rendered the tallow sells at a good price, as it will be entirely free of tallowy odor and excellent for baking. Tallow rendered according to these instructions can be mixed with lard and it will even improve the lard. But it must be sold for what it is: namely, compound lard.

First.—Take beef suet and the beef fat trimmed from steaks and other cuts. Put these through the ⅛-inch-hole plate of a meat grinder. It thus becomes soft and sticky so that it can be rolled in small balls about 1½ to 2 inches in diameter.

Second.—Fill the rendering kettle half full of water. Dissolve in the water 2 ounces of Heller's Lard and Tallow Purifier to every 100 pounds of tallow that is to be rendered.

Third.—Bring the water to boiling point (212 degrees F.). While boiling place the small balls of tallow on top of the water until a sufficient number has been put there to form a layer about 3 inches deep, but in no case to exceed 4 inches.

Fourth.—After the tallow is rendered out of the balls, turn off the heat and allow the kettle to cool. As soon as boiling has ceased, all the cracklings that are on the surface should be skimmed off, put into press and pressed out. The tallow that is on the surface should be skimmed off and put into buckets. Care should be taken that no water is removed with the hot tallow. The tallow which remains in the water can be left there until it is hard. It can then be removed, melted, and run into buckets.

By rendering tallow in this manner it does not become too hot and thus is kept from turning dark; besides, the water and Lard Purifier help to whiten the tallow and draw out the tallowy odor.

As a rule the butcher sells his tallow unrendered at a low price, but if he will render it himself and follow the above instructions carefully, he can sell the tallow for much more, owing to the fact that tallow rendered in this manner produces very fine fat for cooking purposes, considered by many to be much better than lard. It is an easy matter for any butcher to build up an ever increasing trade in home rendered tallow when it is prepared according to these directions.

Sour Lard

Very often steam rendered lard becomes sour on account of the tank water that is mixed with it and not properly separated when the lard is run from the tank. Tank water contains a large proportion of protein matter which is a fertile medium for the growth of bacteria. When the lard is rendered the pressure and heat are high enough to destroy any germs or bacteria that may be in the water, but when it

is drawn off and cooled, and mixes with the air, germs get into it and soon begin to multiply. The decomposition and souring set in. Therefore it is important, after opening the lard tank, to allow it to stand long enough for all the water to settle out, and to be very careful to avoid drawing off any water with the lard. It is also important that the tank into which the lard is drawn to settle, be perfectly clean and free of moisture.

It will depend upon the degree of sourness whether lard that is tainted from tank water can be made fit for food purposes. When a slight off odor is first noted, all the decomposition and sourness are confined to the moisture in the lard, and the lard itself is then not yet affected. When this condition exists it is possible to make such lard fit for food by a thorough treatment with Heller's Lard and Tallow Purifier.

For every hundred pounds of souring lard to be treated, use 100 pounds of water and four ounces of Heller's Lard and Tallow Purifier. Dissolve the Purifier in the water in a jacketed kettle and add the lard to it. Turn on the steam and keep on stirring or agitating the lard so as to wash it thoroughly, and continue for one hour. After it is thoroughly washed, heat the lard as hot as possible without boiling over, and then allow the water to settle out. When the water is all thoroughly settled, skim off the lard carefully, so that it is free of water: the lard will then be perfectly sweet.

Cottonseed Oil-Lard Compounds

For certain purposes cottonseed oil added to lard is preferred to straight lard. In such cases the cottonseed oil is added after the lard has been purified and when it is ready to put into the agitator.

To make a really good compound lard, a cooler with an agitator is necessary; but if one has no cooler with an agitator, the compound can be made by stirring continuously with a wooden paddle so that the lard and oil will not separate while cooling.

When cottonseed oil is used, it may be refined cottonseed oil, and the more it is refined the better the compound will be. Lard should always be run through cheesecloth before putting it in the lard cooler, so as to take out any small particles of detached cracklings which may remain in the lard.

The formula for making compound lard with cottonseed oil varies with the relative values of the ingredients and the quantity of com-

pound desired. The usual compounds sold under trade names, which contain no lard at all, are made of 80 per cent. cottonseed oil and 20 per cent. tallow or oleo stearin. Oleo stearin is beef fat with the oil pressed out of it. The butcher can make this compound by using 80 per cent. cottonseed oil and 20 per cent. rendered beef fat, which has previously been purified with B. Heller & Co's Lard Purifier.

To make a better quality of compound, use less cottonseed oil and add sufficient lard to bring the cost and quality to the desired standard.

All such compounds must be sold as "compound lard" when lard is added; but when no lard is added they must be sold as "compound-lard substitutes," with the formula on the can or package. These preparations are perfectly legal and comply with the pure food laws, provided they are labeled and sold for what they are; but lard compound or imitation lard should not be sold as pure lard.

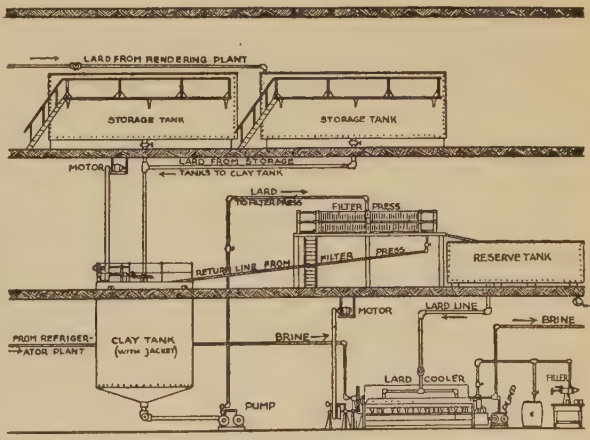
Purchasing Cottonseed Oil

When purchasing cottonseed oil, we suggest that a guaranty be demanded that it complies with all pure food laws. This will then protect the compounder against unforeseen complications.

Refining Lard with Fuller's Earth

The Method Used in Large Packing Houses

The large packers refine lard and tallow by fuller's earth process, and, for the benefit of packers who would like to know how it is done, we give the full directions. A small packing house, however, can hardly afford to put in a plant for the process, as it requires an experienced lard and tallow refining specialist and an equipment costing thousands of dollars. Under 3,000 pounds lard per day, the fuller's-earth method of refining would not be profitable.



LARD REFINING WITH FULLER'S EARTH INSTEAD OF B. HELLER & CO'S LARD AND TALLOW PURIFIER

If a packing house does not make enough lard and tallow to warrant keeping a man especially for this purpose, it will not pay to put in a refinery, which consists of the following machinery:

A receiving kettle, which is a large open tank with steam coils to dry the lard, or a large jacket kettle will do.

A clay kettle, which is a tank with steam coils for heating the lard, and an agitator for keeping the fuller's earth, which is added in this kettle, stirred up.

A filter press which removes the fuller's earth from the lard again.

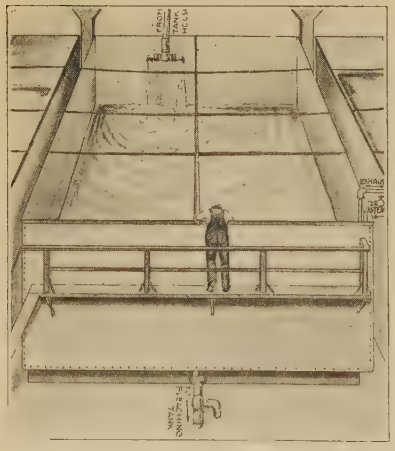
A reserve tank to receive the filtered lard when it is filtered faster than the cooler can cool it.

A lard cooler with agitator to cool and stir the lard while it sets so as to mix it thoroughly.

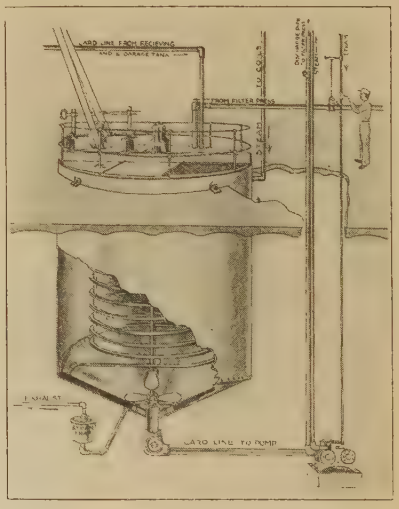
An ordinary size outfit will cost from $8,000 to $12,000.

Directions for Refining

First.—Place the lard, tallow or cottonseed oil, which is termed "stock," in the clay kettle. The clay kettle is simply a heated kettle with an agitator.



RECEIVING AND STORAGE TANK



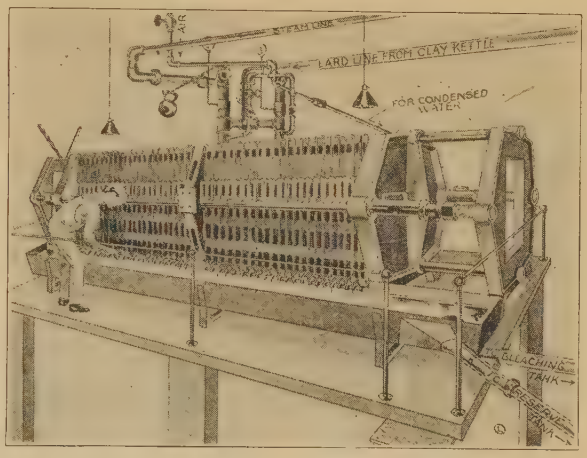
CLAY KETTLE OR BLEACHING KETTLE

The lard must have a temperature of 155 degrees F., tallow 185 degrees, and cottonseed oil 140 degrees. After the desired heat is obtained, regulate the steam so that the temperature will remain stationary while processing.

Second.—Start the agitator and, when the tank is filled with lard, add the fuller's earth.

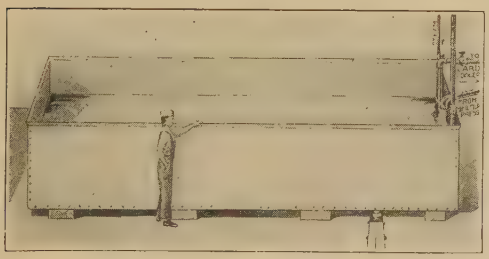
To each 100 pounds of stock add from 1 to 2 pounds of fuller's earth, the quantity depending on the grade of stock*

Third. — After about 20 minutes agitation, start the force pump and pump the stock through the filter press. If the stock is of fine quality and only a small percentage of fuller's earth is used, it is advisable to let the lard run back into the clay kettle. Keep on putting it through the filter and pumping it round until it is thoroughly clarified: then allow it to run into the receiving kettle.



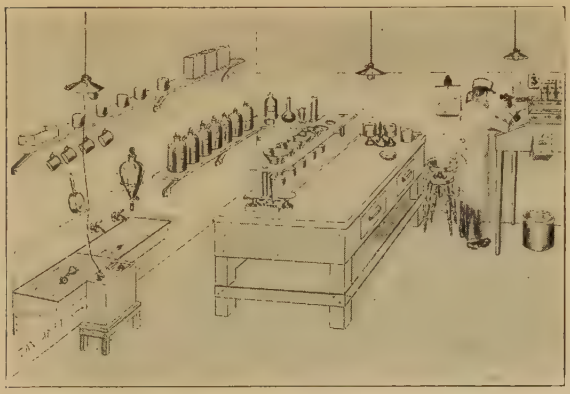
FILTER PRESS

If inferior stock is used, sometimes as much as 4 and 5 per cent. of fuller's earth is necessary to refine it; but it is not advisable to use that large a proportion, as the fuller's earth gives off an odor which the stock sometimes absorbs. Always use the least fuller's earth that good judgment indicates will do the work. If the lard or other stock is not



RESERVE TANK

*Before the stock is treated a small test is made as follows. Heat a small quantity: to a part of it, add one per cent. of clay; to another, 1½ per cent, clay; and to a third, two per cent. Mix each lot thoroughly, put it into a funnel over filter paper and allow it to filter. By comparing results of the three tests, you can tell how much fuller's earth to use for the stock in the kettle. This must be done when the stock varies. Of course, when the lard, tallow or oil is running uniform it is not necessary to make the test; but where the stock changes, it is always advisable to test before treating, for the reason that too much fuller's earth put into the stock will give the lard an objectionable flavor.

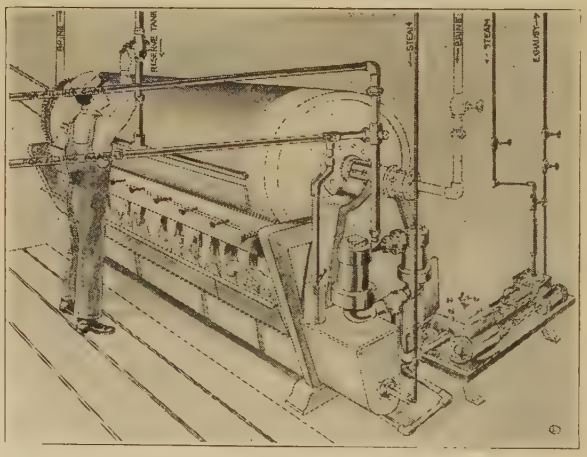


EQUIPMENT OF A LARD REFINERY'S LABORATORY

as it should be after pumping it through the filter, add more fuller's earth and re-filter it.

NOTE.—Be sure to obtain the best fuller's earth. It costs a little more in the first place, but results warrant the greater expense.

Before stock of any kind can be treated with fuller's earth, all moisture must be removed. Lard usually contains from 2 to 3 per cent of moisture and very often considerably more: therefore it must be heated in a jacket kettle until all the water is evaporated. If there is any water in the lard the fuller's earth absorbs the water first, and the lard is not affected, because wet fuller's earth has absolutely no effect upon lard.



LARD COOLER, COOLING TO 64° F.

Making Compound Lard

(In the Lard Refinery)

To make compound lard, treat the different stocks separately: run them in different tanks and then mix them. The proportion or kind of stock to be used depends upon the season of the year, and the kind and quality of goods you wish to make. Equal parts of tallow, lard and oil make a very good compound.

All the filter cloths must be washed frequently to prevent any accumulation of residue and fuller's earth: otherwise they will become clogged and the lard will not pass through freely.

After the compound lard has been thoroughly mixed, it must be put into an agitator and agitated until it is congealed or thick like cream before it is run into buckets.

Yield of Lard from Different Kinds of Hogs

100 lbs. leaf lard will render.....94 to 98 lbs.
100 lbs. fat from extra fat corn-fed hogs..86 to 90 lbs.
100 lbs. fat from fat hogs..... 80 to 84 lbs.
100 lbs. fat from medium hogs.....72 to 76 lbs.

An average of 6 pounds "killing fat" and 13 pounds "cutting fat" is obtained from each hog.

Tanning Skins

Butchers can easily tan the skins of sheep, goats, cattle and calves with Tanaline, and they can often pick up fine skins of wild animals, which too can be easily tanned. After tanning such fancy skins, the butcher can sell them for several times as much as he would realize by selling them to the hide buyer in a raw or air-dried state.

Directions for Tanning Skins

First.—After weighing the skins, soak them in plain cold water: fresh or salted skins for 24 hours, and air-dried skins for at least 48 hours. Then scrape off all the fat with a dull instrument, such as a putty knife or sharp piece of hard wood. Then wash both sides of the skin thoroughly with cold water.

Second.—For every 30 pounds of skins, dissolve 2 pounds of Tanaline and 4 pounds of salt in 5 to 6 gallons of cold water, and when thoroughly dissolved, put the skins into it. Have sufficient water to cover all the skins entirely. Tan small, thin skins in this solution for 24 hours. Goat, sheep, calf and dog skins should be allowed to tan

from 2 to 3 days, according to their thickness. Cattle or horse skins, or skins of a similar nature, require one week in this solution to tan them properly. During the tanning process, overhaul the skins and replace them in the same solution twice a day to get the solution over all parts of the skins uniformly. After tanning, drain off all the solution that can easily be drained off, and spread out the skins with the flesh side up, away from the sun.

Third.—Make a heavy flour paste, thin enough to spread easily, and cover the entire flesh side of the skin with a thin layer (about ⅛ inch) of this paste. Let the skins and flour paste dry 2 to 4 days, according to the weather. The paste will absorb the moisture out of the skins and soften them.

Fourth.—When the skins become dry, work them so that the paste is shaken off. If the skins have been allowed to dry too long, they will be too hard to work, and they should be softened by sprinkling some dampened sawdust over the skins and leaving it on them over night. The skins should next be softened and worked by pulling them over the edge of a table or box until soft and pliable.

Handling Hides

Properly ripped open along the dotted lines, cattle yield a hide of correct pattern, as shown.

The proper handling of the hides of slaughtered animals, so as to obtain the best possible price for them and avoid excessive shrinkage before they are marketed, is a very important matter and should have the butcher's careful attention.

In the first place, it should be borne in mind that it is an easy matter to damage the hide of an animal by prodding it with a pole before killing. This of course should always be avoided.

The killing floor should be kept as clean as possible. If there is blood or manure on the floor it gets on the hair and remains there when the hides are put into the salt pack. This comes in contact with the flesh side of the hide next to it and makes a stain which gives the hide a very bad appearance. Unsoiled and unstained hides make a

better appearance and bring a better price.

The greatest care should be given to the removal of the hide so as not to score it, as this greatly reduces its value to the tanner. A good, careful skinner is worth several dollars a week more to the butcher who kills many animals than a skinner who is careless in his work. The hide should be so nicely removed from the animal that when it comes to the tanner it looks as if it had been planed from the animal. It should be free of cuts and scores.

Trimming of Green Hides

Before the hides are salted, the switches should be cut from the tail and all loose ends of the hide should be cut off. The butt of the ears should be split: if the hides go into the pack without attention to this point, it will make the pack very uneven on account of the thickness of the ear, the salt will not have a chance to penetrate the ears properly, and they will be liable to spoil. Loose pieces of meat that are carelessly left on the hides and all excessive fat should be trimmed off. Hides should not be salted until five hours or longer after the animal is killed, and they should not be piled closely, as this would prevent the animal heat from escaping. If hides are salted with the animal heat in them, very often the hair will "slip," which will make No. 2 hides.

Salt to Use in Salting Hides

The best salt to use for this purpose is crushed rock salt. Large lumps of salt are objectionable on account of leaving indentations in the hides where they are pressed together, which injures their appearance in the eyes of the buyer.

One part fine salt to three parts crushed rock salt makes a fine mixture for salting hides, as the fine salt quickly dissolves and makes a moisture which the hide absorbs.

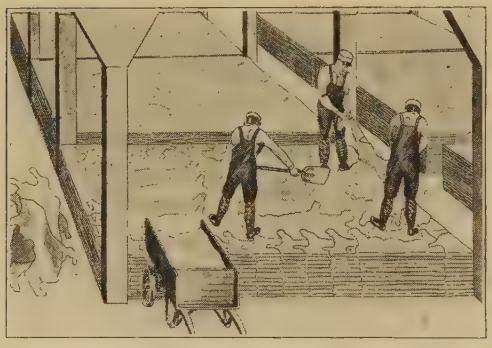
The salt used must be pure and free of alum: otherwise the hair cannot later be removed from the hides.

When re-using old salt for salting hides, always add about one-third of new salt to it, as this gives much better results. About one-third of the salt used is consumed in salting hides; so by adding one-third of fresh salt each time, the supply is kept the same. Always keep the salt as clean as possible. Dirt or manure in it will discolor the hides and they will not make as good a showing to the buyer.

In large packing houses about 35 pounds of salt is used for each

hide. This quantity, which is in excess of the average amount used by small packers, is found to be the proper quantity. It is economical because the salt can be used over and over again, losing only about one-third each time it is used. It is much better for the butcher to invest money in salt, use the proper proportion, and save on the excess shrinkage of hides, which would amount to more than the cost of the salt.

How to Stack Hides When Salting



SALTING DOWN HIDES METHODICALLY TO KEEP PACK LEVEL

The hides may be piled in packs, 3 to 4 feet high. When the pack exceeds 4½ feet in height, the shrinkage becomes too great. Before piling, throw a few shovelfuls of salt on the floor; then spread the hides out and put salt over them. See that some gets on the head and shank ends. When through salting, turn in the sides and ends of the hides at the outer edges of the pack so as to bring up the pack square and straight. This method prevents shrinking. If the outer hides were left unturned, they would permit drainage from the interior of the pack; but if turned, the salt and brine remain in the pack. Then add a little more salt on the head and shank ends and place another hide on top, but never with the flesh side in contact with another flesh side. Continue piling until the desired number of hides is in the pack, and keep the pack level from first to last.

BREAKING CURED PACK FOR SHIPMENT

It is necessary to turn in the edge on only those hides which are exposed on the outside of the packs, and there spread plenty of salt under the folded edges.

How Long to Cure Hides

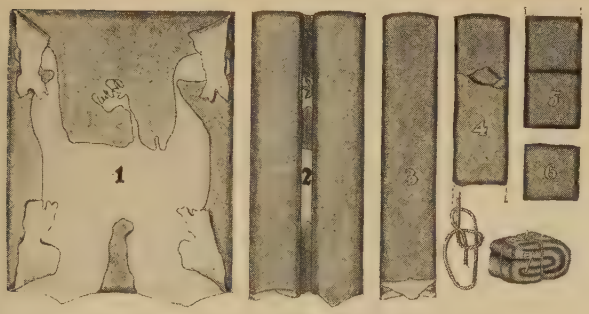
Hides should lie in the pack and salt 25 to 30 days to be fully cured and ready for shipment.

"GRUBBING" HIDES

Salting Switches

The skin and long hair stripped from the end of the tail of cattle are known as the switch. Switches should be spread out on the floor to cool. When thoroughly cool, they can be piled in a heap and salt applied entirely. The more salt put over them the better, as they spoil very easily.

Proper Storage of Hides



HOW TO FOLD A CURED HIDE FOR SHIPMENT

This is a point of very great importance. If many hides are kept on hand for any length of time before shipment, the difference in shrinkage between hides which are properly kept and those which are not so stored may be very great. The careful storing and handling of hides will always repay the time and trouble necessary, not only in the weight of the hides, but in the condition in which they are marketed.

Hides should be kept in a cool room, preferably between 50 and 65 degrees F., and all windows and doors should be kept closed, so as to have no circulation of air.

Polishing Horns and Hoofs

If the surface is rough, first take a rasp or file and file away the rough portion down to the solid horn. File the horn into proper shape,

smoothing the tip and shaping the large end to suit the fancy. After they have been filed, rub with sandpaper until nice and smooth; then finish the rubbing with emery cloth or very fine sandpaper, so as to take out all the scratches. Next scrape with a piece of glass until very smooth. Polish by rubbing with powdered rotten stone and oil; machine oil is good enough. The polishing should be done with the palm of the hand, and the horn or hoof should be rubbed until beautifully polished.

Another way is to polish with powdered rotten stone, tripoli or kieselguhr and oil until all scratches are removed. Then apply tripoli powder or kieselguhr dry and finish polishing with fuller's earth, which will produce a beautiful finish.

Hectograph

How to Print Your Price List and Circular Yourself

Have two tin pans made 12 inches wide, 15 inches long and one inch deep. Then make up the following formula:

1¼ pounds good quality joiners glue,
3 pounds glycerin,
1½ pints water.

Soak the glue in cold water until soft. Drain the surplus water from the glue, add the glycerin and heat near boiling until all is well dissolved, being careful not to burn it. It is best done in a double-boiler. Skim and strain thoroughly through double thickness of cheesecloth. Pour the mixture into a tin bucket to cool. See that the pans are placed level, pour in the mixture while still warm, and allow it to stand at room temperature till firm. It is then a completed hectograph with which the prints are made.

Write the price list or circular letter on a good smooth paper with hectograph ink, using the same size sheet as that on which the printing is to be done. When thoroughly dry, lay it evenly, face down, on the hectograph and smooth down gently. Do not allow any air spaces between the hectograph and the paper. Allow it to stand not over five minutes and then place four pieces of paper around the edges of the written sheet. Then remove the sheet and print by laying blank sheets smoothly in the same position, without air spaces. The small pieces of paper left on will act as a guide to keep the reprint properly registered. A small strip of paper laid across a corner will prevent

sheets from clinging to the glue at that point and so facilitate lifting the sheets. When the required number is printed, wash the hectograph with lukewarm water until all the impression is removed from the surface. Drain thoroughly and allow the surface to set at room temperature before printing again.

When the hectograph gets in a condition where the imprint cannot be removed, break it up, remelt, strain and refill the pan. It is advisable always to have a little extra on hand to replace what is worn off in washing and printing. If the hectograph has been kept in the ice box, do not attempt to use it before it has warmed through to room temperature: otherwise it will pull apart when removing a sheet.

Flies and Smoked-Meat Pests

Wherever stored meats and cheese are not properly screened or otherwise protected, they are apt to be infested with maggots, flies

HOUSE FLY AND ITS MAGGOT: ACTUAL SIZE OF FLY, 5/16"

Screw Worm Fly and Screw Worm: actual size of Fly 3/8"

Ham Beetle and Ham Beetle Larva: actual size of Beetle 1/2"

and beetles, which damage or destroy merchandise, often causing serious losses. Various blow flies are apt to deposit their eggs on meat, but the pests which usually come in question are the skipper and the ham beetle.

Ham Skipper Fly and Ham Skipper: actual size of Fly 3/16"

The skipper, known also as the ham skipper and cheese skipper, is a white maggot, about one-third inch long when full grown. It usually moves by creeping; but when alarmed it may bend into ring form and then spring as much as 6 inches vertically and up to 10 inches

Cured Ham badly injured by Ham Skippers.

horizontally. It shuns the light and burrows into the interior of meat, eating out the tissue until the meat is honeycombed with holes of varying size.

The maggots are hatched out of eggs laid on the surface of the meat and in its crevices by glistening, black, active flies, about half the size of the common housefly. Eggs may be deposited on meat even through the meshes of cloth. Usually about 140 eggs are laid by each female in a few days of life. The complete life cycle (egg, maggot, pupa, fly, egg) takes from 12 days upward. The fly itself feeds only on the juices of the food selected. It infests piles of horns, bones and similar accumulations which are apt to be found around butcher shops and packing houses, and from these finds its way into store rooms. It is most active and most injurious in midsummer.

To save infested meats, it is necessary to trim off the parts which show evidence of the work or presence of the various insect pests. Burn those trimmings. The uninfested parts are not affected and may be perfectly clean and wholesome. If mutilated in trimming, such wholesome, clean parts should be used in sausage and meat loaves. In the case of ham mites, after trimming off visibly infested parts of the meat, the remainder may be brushed carefully and, to make doubly sure, it may also be washed in hot water.

To rid the infested rooms of the pests, a thorough cleaning is necessary. Remove the meats and other exposed foodstuffs, as well as anything which may interfere with a thorough cleaning. Either fumigation or thorough spraying will kill all but the ham mites. For those, only spraying is effective.

For spraying, use $1,000.00 Guaranteed Fly Killer in an atomizer and blow it into cracks, crevices and corners, and on shelves, window sills and ledges. Then screen the openings and air the room a few minutes before returning the meats. The Fly Killer evaporates completely without causing stains of any kind.

For fumigating, use Heller's Aseptifume according to directions.

To keep out the pests, protect all openings with well fitted screens of not less than 30 meshes to the inch. This will keep out skippers and beetles. The mites travel only by attaching themselves to larger bodies so that they too will be kept out. Before you enter a screened store room, brush flies and beetles from the door, or, better yet, spray

the door and screen, from time to time, with $1,000.00 Guaranteed Fly Killer, to prevent their congregating where they can slip in whenever the door is opened. Piles of animal refuse should be cleared away at frequent intervals or sprayed thoroughly with $1,000.00 Guaranteed Zanzibar-Brand Fly Chaser or with $1,000.00 Guaranteed Fly Killer.

If conditions and circumstances make it impossible to keep the pests from the meats, it may become necessary to coat the meats with a protective covering of cloth and paint, as follows.

Yellow or White Ham Wash

To protect smoked hams, shoulders, bacon and other smoked meats from the attack of skippers, ham beetles, ham mites, blow flies and vermin, they may be wrapped in paper and sewed in cloth and then coated with either yellow or white paint, especially made for the purpose.

Dry the hams or other meats thoroughly after smoking. The more moisture left in them, the easier for mold to grow on the meat. Wrap each piece completely in parchment or other clean, white paper. Sew a covering of canvas or heavy muslin snugly over this, with a loop of stout cord for hanging.

For the Yellow Coating, prepare the following **Standard Formula for Yellow Ham Wash.**

For each 100 pounds of hams, shoulders or other smoked meats, use:

3 pounds barytes (barium sulphate),
6½ ounces wheat flour,
1¼ ounces chrome yellow (lead chromate),
1 ounce glue.

For small operations.—In an ordinary pail, stir the flour into about 5 quarts water, working out all lumps. Dissolve the chrome yellow separately in a quart of water and add this and the glue to the flour-and-water mixture in the pail. Heat the whole to boiling point (212 degrees F.) and then slowly stir in the barytes. Let it stand until the following day before using. Then keep it well stirred up while using and apply it with a brush, covering completely.

For large operations.—Prepare the coating mixture in a vat of suitable size that has a steam inlet, using the proportions of above formula for as large a quantity as required. Soak the glue over night in cool water to soften it. Dissolve the ingredients (including the soaked glue) in the vat, heat it with steam to boiling point and slowly stir in the barytes. It can be used as soon as all is dissolved and cooled. Throw in the hams or other meat that have been wrapped and sewed in. Then hang them with the loops over hooks on a beam

or stout rod that is centered lengthwise over the vat. Strip off the surplus coating; then brush over the coating to spread it evenly and let it dry on ham trees.

For the White Coating, use the same formula and prepare and use it in the same manner as the Yellow Wash with one exception: use about ¼ teaspoonful of prussian blue per 100 pounds of meat instead of the chrome yellow, first dissolving it in a quart of water in the same way.

Those who get the wash (either yellow or white) on their hands and person should clean their hands and finger nails before handling foodstuffs and before going to meals.

Keep the bagged meats at a moderate, even temperature, as dry as circumstances permit.

Sticky Fly Paper

Every butcher can make his own sticky fly paper with very little trouble. It is made as follows:

1 pound rosin,
3½ ounces molasses,
3½ ounces boiled linseed oil.

Boil the three together until the rosin is all dissolved. It is then ready to be spread on heavy manilla paper. The proper and quickest way is to take a sheet of heavy manilla paper and spread the mixture on half the surface of it, leaving a clean margin of an inch or more at the outer edge. Then double the paper over: the quantity of mixture on the first half is sufficient to coat the face of the other.

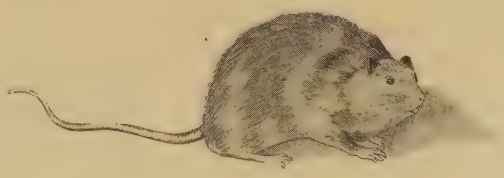
The cost of making this sticky fly paper is very small and in an hour any butcher can make enough to last the entire summer. When a supply is so made for future use, it should be laid away in stacks of not more than a dozen each: otherwise, the pressure would force the sticky coating out at the edges. The sheets must be stored flat at living room temperature: if kept colder, the coating would stiffen so as to prevent opening the sheets for use; if too warm, the coating would soften and run.

Even when it has a paraffin border, sticky fly paper is apt to be a nasty mess to handle. It is always unsightly and highly unappetizing to have the sheets scattered about with dead flies adhering to them.

Where $1,000.00 Guaranteed Fly Killer is properly used, there are no flies that make the use of other methods necessary.

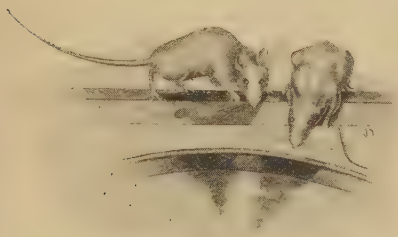
Rats and How to Get Rid of Them

The Injury They Do



Nearly one-half billion dollars' worth of property, at present values, is destroyed in the United States every year by rats alone. The added destructiveness of mice may be left to the imagination.

Packing and slaughter houses, meat markets and sausage kitchens, barns and poultry houses, like all stores, granaries, restaurants, and places where food is prepared or sold, are particularly troubled with rats. Garbage cans and unprotected foods encourage them. Frame buildings, wooden floors, the double walls and sawdust insulation of cooling rooms—these offer so many hidden nooks for nesting and protection that they are inordinately infested.



In such places, at moderate temperature, the common rat raises at least eight litters per year, each litter comprising from ten to 24 young. Thousands of living rats are sometimes found under the floors of neglected old buildings, each individual consuming its $2 worth of food per year and destroying property to the value of at least $3 more.

Rats even directly endanger life and health, not so much because they have been known to attack sleeping persons and animals, but because they are proven carriers of bubonic plague, trichinosis, tapeworm cysts, roundworm, fleas, and intestinal diseases. These diseases and parasites are transferred to man or beast through fleas and through foodstuffs with which the rats come in contact.

In small communities and at the outskirts of large cities, there is a great exodus of a part of these rats to the country when field conditions tempt them. Here they climb corn stalks for the grain, climb vines and trees for the fruits, and nest in hay and straw stacks, and under barns, poultry houses and dwellings. At the approach of

winter they return in part to the more congenial surroundings of heated city buildings.

An Effective Remedy

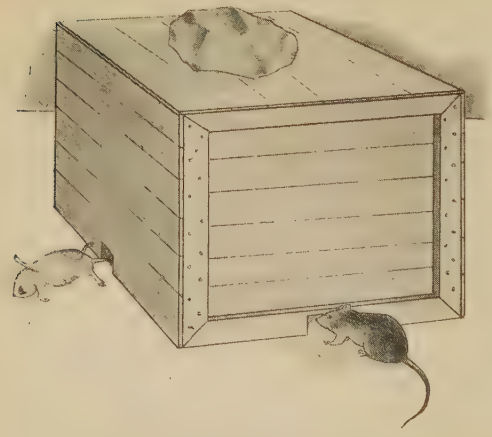
Guillotine traps and cage traps may catch a visiting strange rat, from time to time, but the home tribe increases in spite of them. They learn to spring the traps and eat the bait. Professional rat catchers employ weasels in addition to traps. But it seems these only serve to scatter them for a time, and the rats return to their accustomed haunts within a few days.

The one sure remedy is Heller's $1,000.00 Guaranteed Rat and Mouse Killer.

The best results are obtained by spreading it on corn bread or corn cake, or on buttered toast. Entire colonies have been completely and quickly wiped out with $1,000.00 Guaranteed Rat and Mouse Killer. They do not die within the house. The poison creates a burning sensation in them which they try to quench by rushing out frantically in search of water. There the action of the poison finishes them.

Wherever possible, local authorities should take part in the campaign of extermination, in order that there may be concerted action, and that time and money may not be wasted on ineffective measures. Heller's $1,000.00 Guaranteed Rat and Mouse Killer will do more than its share in getting rid of rats and mice in meat markets, packing houses, sausage kitchens, and communities.

Protect Poultry and House Pets



HOW TO KEEP OTHER ANIMALS FROM OUR $1,000 GUARANTEED RAT AND MOUSE KILLER

To use $1,000.00 Guaranteed Rat and Mouse Killer where there are chickens, dogs and other household animals, the bait must be so placed that the rodents will be attracted to it without at the same time exposing the other animals to danger.

To do this, cut a hole large enough to admit a rat, and no larger, in each of the four sides of a large box. Invert this over the bait and weight it down.

This admits rodents from all sides while excluding larger animals.

Where a large number of wary rats is to be disposed of, the bait will need to be changed occasionally to cheese, broiled meat or bacon, crackers, spaghetti, in fact anything unusual and attractive. Vary the bait between meat products, cereal products and fruits or vegetables.

Cockroaches and How to Get Rid of Them

Most of the cockroaches we see are the American, the German, the Australian, and the oriental cockroach. Some of the names applied to them locally, without regard to species, are "water bugs", "croton bugs", "black beetles", and "bread eaters". "White roaches" are the young that have just molted, before the new skin has darkened.

These repulsive insects most commonly infest grocery and other food stores, bakeshops, restaurants and hotels, packing and slaughter houses, factories and ships, and especially our homes. No housekeeper who prides herself in the cleanliness of her home will patronize a store or shop that is infested with roaches for fear they will be brought into her house with merchandise.

Cockroaches feed on the filth in sewers, cesspools, privy vaults, sickrooms, and spittons, as well as on our own foodstuffs. By traveling between these they befoul the counters, show cases, and merchandise with their vomit, their dung, and their sickening roachy odor. They may easily be the unsuspected cause of spreading scarlet fever, dysentery, and other communicable diseases.

Cockroaches shun the light and must be numerous indeed if any are crowded out to seek food during the day or after the room is lighted.

Sprays and insect powder are not practical as remedies against cockroaches. At best they can give only temporary relief. If they kill at all, they kill only those exposed to the actual spray. They have no effect on the far greater number hidden in the walls and other inaccessible places nor on the unhatched that for several weeks will continue to come from their hidden nests.

The true remedy must be one that will be carried to the young in floors and wall before it kills.

$1000.00 Guaranteed Roach Killer is not a spray or ordinary insect powder and roaches do not shun it as they do many powders now

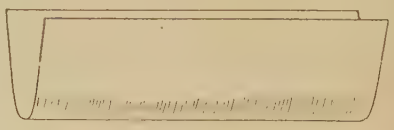
on the market. In fact, they like it, crawl through it, and eat it. In cleaning their legs, they get enough to insure death; but its action is not instantaneous: they linger on long enough to carry to their nests and to their young the powder that adheres to the bodies. Later, when the eggs hatch, the young feed on the powder that has been carried into the walls. This explains why $1000.00 Guaranteed Roach Killer has never failed to wipe out roaches completely where it was used according to our directions.

How to Use $1000.00 Guaranteed Roach Killer

Shake or drop $1000.00 Guaranteed Roach Killer liberally in all places frequented by the roaches, so that they cannot avoid coming in contact with it, no matter if it is in the store, in the sausage kitchen, or in the home. Drop it along the baseboards; into all crevices and openings large enough for the thin, flat insects to hide in; around the sinks and at points where water pipes and drains come out of the walls and floors: finally around the ice box, cooler, refrigerator, storeroom, and pantry, both on the floors and on shelves.

Where roaches are numerous, it may take several days before their gradual disappearance can be noticed; but the reduction is going on just the same and the Roach Killer should be left to do its work until all are gone—even the young that will continue, for several weeks, to hatch from the eggs laid in the wall and hidden places by adult roaches before they were killed. Renew it when it becomes noticeably mixed with dust.

If the sight of the Roach Killer is objectionable, it may be shaken on cards. Daily, at the close of business, these cards may be laid about in all places frequented by roaches. They can be gathered up every morning and put away for the day.



Troughs with Roach Killer may be hidden behind sinks, water pipes and furniture in stores, restaurants, hotels, institutions, and homes. Take a piece of tin 4 or 5 inches wide and a foot or two long, bend it lengthwise, put a liberal quantity of $1000.00 Guaranteed Roach Killer into it, and push it in place where the cockroaches will find it. If it is wide enough, the springiness of the tin will hold it in place.

As a preventive, it is well to keep $1000.00 Guaranteed Roach Killer scattered about in places where they would be likely to turn up when new arrivals are introduced to the premises.

FREEZE-EM-PICKLE
POLAR BRAND
B. HELLER & CO. MFG. CHEMISTS
CHICAGO, U. S. A.

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FREEZE-EM-PICKLE

(Reg. in U. S. Pat. Off.—Reg. in Canada)

A PREPARATION FOR THE PERFECT CURING OF HAMS, BACON, SHOULDERS, CORNED BEEF, TRIMMINGS AND MEATS FOR ALL SAUSAGES AND MEAT LOAVES.

The Freeze-Em-Pickle Process permanently fixes the tempting, natural cherry red color of the lean in any kind of meat, to the very center. Gray rings and gray centers in sausage and corned beef need never occur with the Freeze-Em-Pickle Process.

The Freeze-Em-Pickle Process congeals the albumin and jells the natural juices in the meat, thus reducing shrinkage. Hams, bacon, corned beef, and sausage meat cured in this way are juicy and have a uniformly mild, delicious flavor.

The Freeze-Em-Pickle Process keeps cured bacon and sausage meat six months or longer, without overhauling. They are then like newly cured, and the sausage meat has the same superior binding properties as when used in a few days. Bologna and other sausages made of it according to our simple directions, cannot be "short" or crumbly.

The Freeze-Em-Pickle Process hastens the cure. Where our directions are followed, bone sour and other spoiling of meat and meat products are unknown.

The use of Freeze-Em-Pickle is simple. You can't go wrong. Any butcher is equipped to profit by its use. Full directions, in plain language, accompany each shipment. Even untrained help can use this product.

THE FREEZE-EM-PICKLE PROCESS SHOULD BE USED FOR ALL CURES

Sweet-Pickle Cure (Fancy S. P. Meats),
Regular Pickle Cure (Ordinary Meats),
Dry Cure (Sugar-Cure in Boxes and Trimmings in Tierces),
Dry-Salt Cure (D. S. Meats),
Combination Cure (S. P. and D. S.),
Barrel Pork Cure,
Beef Cure,
For Making Pumping Brines,
For the Canning Cures,
For Curing Tongues, Goose Shanks, Mutton, Reindeer, Game, and All Kinds of Sausage Meat.

ELIMINATE MEAT CURING TROUBLES

by Adopting the Freeze-Em-Pickle Process

FREEZE-EM-PICKLE IS PUT UP IN

15-pound trial case (15 one-pound cartons),
25-pound case (25 one-pound cartons),
50-pound case (50 one-pound cartons),
100-pound case (100 one-pound cartons),
½-barrel (275 pounds, bulk),
barrel (500 pounds, bulk),

Write for Current Price List

BULL-MEAT-BRAND FLOUR

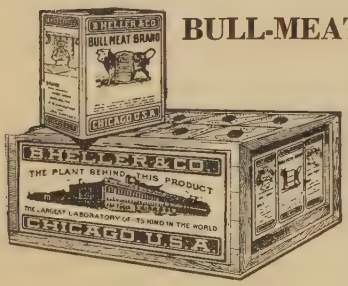
(Reg. U. S. Pat. Off.)

Bull-Meat-Brand Flour **is the most satisfactory blender, binder and absorbent for all smoked or cooked sausages, for pork sausage, and for meat loaves. It has the reputation of being the best binder on the market.**

Bull-Meat-Brand Flour **is used to prevent the shrinkage of sausage and meat loaves by absorbing the meat juices, fats and added moisture which would otherwise be extracted in smoking and cooking. Shriveling is entirely eliminated where sausage containing Bull-Meat-Brand Flour is handled according to our directions. Sausage makers who know this product safeguard their reputation by insisting on Bull-Meat-Brand Flour.**

Bull-Meat-Brand Flour **does not dry out nor become lumpy in sausage or meat loaves, but blends perfectly with the meat and fat, as if a part of them, when used according to our directions. It is wholesome, improves flavor, and adds to the food value of the product.**

Bull-Meat-Brand Flour **is a pure cereal product, made of selected grain, especially processed for efficient use in sausage and meat loaves. Fermentation and souring caused by ordinary flours are avoided with Bull-Meat-Brand Flour.**



BULL-MEAT-BRAND FLOUR IS PUT UP IN

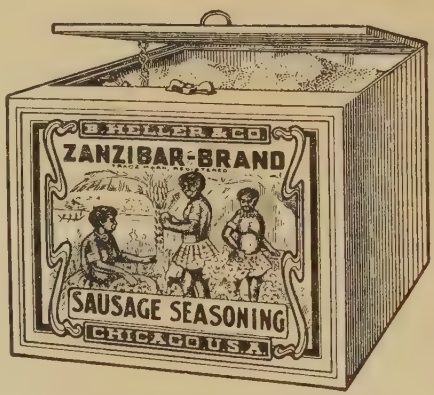
5-pound carton,
50-pound case (10 5-lb. cartons),
100-pound case (20 5-lb. cartons),
125-pound drum,
300-pound barrel.

For Quotations, See Current Price List

ZANZIBAR-BRAND

(Reg. U. S. Pat. Off.)

PREPARED SAUSAGE SEASONINGS



Are Prepared with the finest spices obtainable, thus their use insures the highest quality and their purity and strength make them economical.

Zanzibar-Brand Prepared Seasonings **were developed from formulas which the master craftsmen in past generations of the Heller family have carefully guarded from imitation. They produce the zestful, piquant flavors which distinguish the products of the most famous sausage kitchens of Europe and America.**

The ingredients **of Zanzibar-Brand Prepared Seasonings are carefully selected, scientifically tested, and standardized for unvarying flavor and strength. Any man, even without experience, can give to sausage its correct flavor and delightful aroma, and have it of the same uniform excellence the year round, by using Zanzibar-Brand Prepared Seasoning.**

The spices and herbs **used in Zanzibar-Brand Prepared Seasonings are absolutely pure, of full strength and fine quality. They therefore go much further, dollar for dollar, in satisfactorily seasoning sausages and meat loaves than when inferior or adulterated spices are used.**

A SEASONING FOR EVERY SAUSAGE

Blood Sausage,
Bologna,
Corned Beef,
Frankfurt or Wiener,
Hamburger,
Headcheese and Souse,
Liver Sausage, Braunschweiger,
Mettwurst, German (without whole spice),
Metvurst, Swedish,
Minced Ham,
Pickled Tongue and Pig Feet,
Polish Sausage,
Potato Sausage, Swedish,
Pork Sausage,
Dixie Special,
English Breakfast,
German (no sage),
Hungarian,
Old-Style Southern Farm,
Old-Style Southern Farm, Extra Hot,
Yankee-Style (with sage),
Poultry Seasoning,
Salami (including some whole pepper and whole mustard seed),
Scrapple,
Spanish Sausage,
Summer or Cervelat (including some whole pepper and whole mustard seed).

All formulas in this book give the kind and the exact quantity of Seasoning to use.

FOR REPUTATION AND PROFIT

Use Zanzibar-Brand Prepared Seasonings

ZANZIBAR-BRAND PREPARED SEASONINGS ARE PUT UP IN

10-pound can,
25-pound can,
50-pound can,
100-pound can,
150-pound barrel,
300-pound barrel.

POULTRY SEASONING IS PUT UP IN

18-ounce carton (12 1½-ounce cans, for retailing),
1½-pound can,
9-pound case (6 1½-pound cans),
18-pound case (12 1½-pound cans).

Write for Current Price List

MOMSIE-MIX

(Reg. in U. S. Pat. Off.—Reg. in Canada)

B. HELLER & COMPANY
SOUTHERN STYLE
EXTRA HOT
MOMSIE-MIX
REG. U.S. PAT. OFF.
REG. IN CANADA
CONTAINS ALL NECESSARY INGRIDIENTS IN CORRECT PROPORTIONS TO MIX WITH THE MEAT FOR MAKING DELICIOUS MOMSIES
CHICAGO, U. S. A.

MOMSIES
YANKEE STYLE
THE ONE-MINUTE MEAL
TEMPTING-JUICY-DELICIOUS
Make into thin patties and fry a few moments in deep fat: They are then ready to serve.
Per Lb.

Momsie-Mix is a product we have originated and perfected for making Momsies, the one-minute meal. It contains everything necessary except the meat, fat, and water needed to make the Momsies. No salt, seasoning or binder should be added, as everything necessary is in the Momsie-Mix.

No casings are used: a meat grinder and a mixing tub are all the equipment needed.

Flavors in Which Momsie-Mix is Put Up

Dixie Special Momsie-Mix,
Hamburger Style Momsie-Mix,
English Breakfast Style Momsie-Mix,
Southern Style, Extra Hot, Momsie-Mix,
Yankee Style Momsie-Mix,
Frankfurt Style Momsie-Mix,
Coney Island Style Momsie-Mix,
Swedish Style Momsie-Mix,
Hungarian Style Momsie-Mix.

Any one of these flavors added to meat, fat and water, makes bulk Momsies

The method is fully described on page 302. It costs less than Hamburger or Sausage and sells for more.

The bulk Momsies may be sold by the pound or packed in convenient cartons bearing the butcher's advertising. *In the home or at the lunch counter,* the mixture is made into *delicious*

MOMSIE SANDWICHES
MOMSIE CAKES
MOMSIES IN RAMEKINS OR MOLDS
MOMSIE MEAT BALLS
MOMSIE-STUFFED CABBAGE
MOMSIE LOAF, ETC.

The butcher receives a supply of *printed directions for distribution,* and *display cards* for his counter, with every order for *Momsie-Mix.*

Momsies, the One-Minute Meal, Are a Trade Builder.

MOMSIE-MIX IS PUT UP IN

Trial case (15 1-pound packages),
¼ case (25 1-pound packages),
½ case (50 1-pound packages),
Case (100 1-pound packages),
½ barrel (200 pounds, bulk),
Barrel (400 pounds, bulk).

Be sure to mention the flavor desired.

For Quotations, See Current Price List

FREEZE-EM

(Reg. in U. S. Pat. Off.
—Reg. in Canada)

A PURIFYING AGENT

for Ice Boxes, Blocks, Counters, Meat Hooks, Vats, Tierces, Tubs, Sausage Machinery and Equipment, Tools, Utensils, etc.

Do not confuse Freeze-Em, a purifying agent, with Freeze-Em-Pickle, which is a curing compound.

The liberal use of Freeze-Em is excellent for cleaning meat-block tops, meat grinders, silent cutters, and other machinery, tools, utensils, and containers. Floors and walls of ice boxes and refrigerators should be purified by adding Freeze-Em to the water used in rinsing.

How to Use Freeze-Em as a purifier.—**First wash thoroughly with hot water and soap or a reliable washing powder. We strongly recommend our Ozo Washing Powder (an efficient soap powder) or our Tru-White Washing Powder (which does not lather). Then prepare a rinsing solution, in quantity needed, at the rate of**

4 ounces Freeze-Em,
1 gallon hot water.

Dissolve completely and rinse thoroughly with this solution, not overlooking the corners and crevices. On old barrels and tierces intended for curing, use Freeze-Em both inside and outside, always using fresh boiling water for the final rinse.

FREEZE-EM IS PUT UP IN

Cans

1-pound can,
½ dozen 1-pound cans,
1 dozen 1-pound cans,
2 dozen 1-pound cans,

5-pound can,
½ dozen 5-pound cans,
1 dozen 5-pound cans,
2 dozen 5-pound cans.

Bottles

1 pound bottle,
5 pound bottle,
½ dozen 5-pound bottles,
1 dozen 5-pound bottles,
2 dozen 5-pound bottles.

Bulk

25-pound pail,
50-pound pail,
100-pound keg,
300-pound half barrel,
600-pound barrel.

Write for Current Price List

ZANZIBAR-CARBON-BRAND
(Reg. U. S. Pat. Off.)

BROWN CASING COLOR

(**Powder**)

An Appetizing Smoke-Shade Color,
Unequaled for Brilliancy.

Saves Time and Smokehouse Shrinkage; Saves the Juices, Flavor and Appearance.
Makes Smoke Color Permanent.

Does Not Color the Water in Recooking.

Absolutely Harmless.

Permitted in U. S. Government-Inspected Houses.

ZANZIBAR-CARBON-BRAND
(Reg. U. S. Pat. Off.)

LIVER SAUSAGE CASING COLOR

(**Powder**)

Produces the Beautiful Light Golden Yellow of Braunschweiger and other Smoked Liver Sausage.

Absolutely Harmless.

Permitted in U. S. Government-Inspected Houses.

FOR BOTH COLORS

A sample from each lot is submitted to the U. S. Department of Agriculture. The Government gives us a Certificate Number for each lot. The Number and our Guaranty are on each can. Every can is sealed with a lead seal, as here pictured, for your protection.

Directions for Coloring Sausage Casings, either in the Sausage-Cooking Water or by Momentary Dipping, are given on pages 157 to 159.

BOTH BROWN AND YELLOW CASING COLOR ARE PUT UP IN

1-pound can,	25-pound can,
5-pound can,	50-pound can,
10-pound can,	100-pound can.

For Quotations, See Current Price List

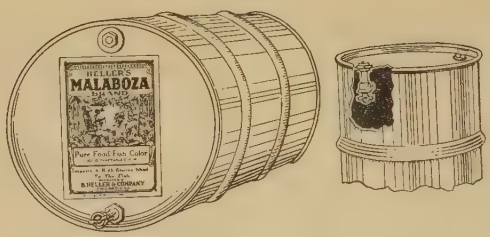
MALABOZA

(Reg. U. S. Pat. Off.)

Pure-Food Fish Color

(Liquid)

Contains No Aniline —No Coal-Tar Coloring Matter.



In order to produce a satisfactory smoke color with smoke alone, it is necessary to smoke fish at so high a temperature that the shrinkage destroys the profit and the fish becomes too dry and hard to be palatable. Therefore, it is customary in states where the coloring of smoked fish is permitted, to smoke lightly for flavor and depend on a harmless color for the color that custom has established.

Malaboza Pure-Food Fish Color produces an appetizing, rich, lustrous, golden yellow smoke color which adds much to the salability of the fish. It does not affect the taste or quality of the fish. It is economical, efficient and harmless. Packers of smoked fish will find Malaboza Pure-Food Fish Color indispensable.

MALABOZA PURE-FOOD FISH COLOR IS PUT UP IN

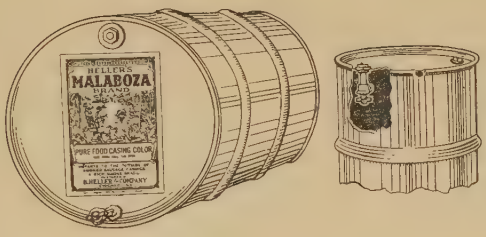
1-gallon jug,
6-gallon case (6 1-gallon jugs),
10-gallon steel drum,
20-gallon steel drum,
30-gallon steel drum,
55-gallon steel drum.

For Quotations, See Current Price List

MALABOZA
(Reg. U. S. Pat. Off.)

Pure Food Casing Color

(Liquid)



Contains No Aniline —No Coal-Tar Coloring Matter.

Malaboza Pure Food Casing Color is used to color the outside of smoked sausage casings. It imparts to the casing a beautiful, rich smoke-shade color that is most pleasing. Sausages need only a light smoke when this color is used on the casings. This means more juicy sausage and an inviting, appetizing appearance that is conducive to largely increased trade.

Malaboza Pure-Food Casing Color contains no aniline color and is sealed in steel drums, secure from contamination. The drum is equipped with a faucet which insures sanitary handling when any of the color is withdrawn.

Malaboza Pure-Food Casing Color is used in the same manner as described on pages 157 to 159, either in the cooking water or in a momentary dip.

MALABOZA PURE-FOOD CASING COLOR IS PUT UP IN

1-gallon jug,
6-gallon case (6 1-gallon jugs),
10-gallon steel drum,
20-gallon steel drum,
30-gallon steel drum,
55-gallon steel drum.

Write for Current Price List

The Secret of Profit in Meat Products *is in* Preventing Losses

Save Money by Preventing the Losses Due to Spoiled Meat

"A" CONDIMENTINE

A Dry-Powder Preparation for Use in Unsmoked Sausage, Sausage Meat and Veal Loaf

"A" Condimentine is a harmless condimental preparation which assists in keeping unsmoked sausage in firm, fresh, and palatable condition, without affecting or altering the natural color of the meat. Use it in all varieties of

Unsmoked Pork Sausage,
Liver Sausage,
Bratwurst,
Bockwurst,
Veal Loaf,
Scrapple,
Souse.

Every step in sausage making, as given in the formulas contained in this book, from the cure to the final cooling, is important if the product is to taste and appear at its best, stand packing for shipment, and show no discoloration. "A" Condimentine has its part in this and gives you confidence that you will increase sales when you display such goods.

A very little will do the work: ¼ to ½ pound of "A" Condimentine in each 100 pounds of sausage meat or meat for veal loaf. The formulas give directions for the proper use of "A" Condimentine. It complies with the United States Government Meat Inspection Regulations and its use is permitted in Government Inspected Packing Houses.

"A" CONDIMENTINE IS PACKED IN

15-pound trial case (15 1-pound cartons),
¼ case (25 1-pound cartons),
½ case (50 1-pound cartons),
case (100 1-pound cartons),
½ barrel (200 pounds, bulk),
barrel (400 pounds, bulk).

Write for Current Price List

Turn Out Goods That Hold Their Flavor and Aroma

"B" CONDIMENTINE

A Dry-Powder Preparation for Use in Smoked Sausage, Air-Dried Sausage, and Meat Loaves

"B" Condimentine is a harmless condimental preparation which assists in keeping the flavor, aroma, and pleasing appearance of properly made sausage and meat loaves. Use it in all varieties of smoked and cooked sausage, particularly—

Bologna,	Blood Sausage,	Summer Sausage,
Frankfurts,	Headcheese,	Cervelat,
Wieners,	Farmer Sausage,	Mettwurst,
Minced Ham,	Polish Sausage,	Holsteiner.
Luncheon Roll,	Mortadella,	Salami,
Smoked Pork Sausage,	Knackwurst,	Meat Loaves.

In order to turn out a product that will keep its pleasing firmness, aroma and flavor, and not discolor when sliced, it is necessary to follow every step in the formulas and directions in this book, from the curing of the meat to the final cooling. "B" Condimentine has an important part in this and gives you confidence that you will increase sales when you ship or display such goods.

"B" Condimentine is added to the meat at the time the seasoning is added, as shown in all the formulas. The benefits derived are out of all proportion to the nominal cost. It is permitted under U. S. Pure-Food Laws and can be used in Government Inspected Packing Houses.

"B" CONDIMENTINE IS PACKED IN

15-pound trial case (15 1-pound cartons),
¼ case (25 1-pound cartons),
½ case (50 1-pound cartons),
case (100 1-pound cartons),
½ barrel (200 pounds, bulk),
barrel (400 pounds, bulk).

For Quotations, See Current Price List

B. HELLER & CO'S

KONSERVIRUNGS SALT

(Trade Mark Reg.)

Of Two Kinds: White and "Red"

They do Not Contain Any Ingredients Forbidden under the National or State Pure Food Laws.

WHITE KONSERVIRUNGS SALT

For temporary salting, especially in warm weather, of such meats as veal, mutton, reindeer, venison and other game.

For making the 40-degree brine *(Lake)* in which home-style *(hausmacher)* and Brunswick *(Braunschweiger)* liver sausage and headcheese *(Schwartenmagen)* are cooled or in which potato sausage and other sausages may be kept.

It is easy to use on meats, rub 4 to 8 ounces on each hundred pounds; for the brine, dissolve enough in clean water to test 40 degrees on the salimeter *(Lakemesser)*.

"RED" KONSERVIRUNGS SALT

A white-powder preparation for making pickle *(Poekellake)* for the cure of hams, bacon beef, tongues, pig feet, barrel pork, and all pickle-cured meats that are to have the wonderful mild flavor, natural cherry-red meat color, and excellent keeping quality of the finest German products.

For salting down trimmings and other meats to be used in bologna, frankfurts or wieners, cervelat, Mettwurst, Knackwurst, and all other sausages intended for smoking or drying.

For the pickle cure, use for each 100 pounds of meat:
- 8 pounds salt,
- 1 pound Heller's "Red" Konservirungs Salt,
- 2 pounds best granulated sugar,
- 6 gallons cold water.

For pumping pickle (Spritzlake), use:
- 2 pounds salt,
- 1 pound Heller's "Red" Konservirungs Salt,
- 1 pound best granulated sugar,
- 1 gallon water.

And pump *(spritz)* at the rate of 1 ounce pumping pickle for each pound of meat in the piece.

For dry-curing sausage meat, use for each 100 pounds of trimmings:
- 1 pound Heller's "Red" Konservirungs Salt,
- 2 pounds salt.

HELLER'S KONSERVIRUNGS SALT (WHITE OR "RED") IS PUT UP IN

15-pound trial case (15 1-pound cartons),
¼ case (25 1-pound cartons),
½ case (50 1-pound cartons),
case (100 1-pound cartons),
½ barrel (250 pounds, bulk),
barrel (500 pounds, bulk).

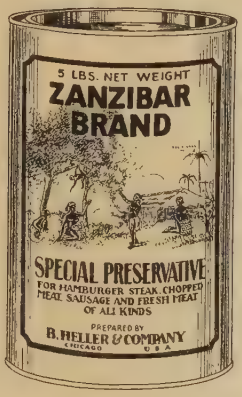
Write for Current Price List

ZANZIBAR-BRAND

SPECIAL PRESERVATIVE

—For—

Hamburger Steak, Chopped Meats, Sausage, and Fresh Meats of All Kinds


5 LBS. NET WEIGHT
ZANZIBAR BRAND
SPECIAL PRESERVATIVE
FOR HAMBURGER STEAK, CHOPPED MEAT, SAUSAGE AND FRESH MEAT OF ALL KINDS
PREPARED BY
B. HELLER & COMPANY
CHICAGO U S A

Does Not Affect or Impair Quality or Nutritive Value of Meat

Zanzibar-Brand Special Preservative contains only preserving materials permitted, under the regulations of the inspection service of the U. S. Department of Agriculture and the Pure-Food Laws of most states. Certain labeling requirements should be complied with, as herein explained.

Zanzibar-Brand Special Preservative is economical in stopping losses and easy to use. Meat and meat products containing it must be labeled or displayed with a card stating that it "Contains less than one-tenth of 1% Benzoate of Soda." We inclose several such counter cards with each shipment of Special Preservative.

Use Zanzibar-Brand Special Preservative, where permitted, in the proportion of 4 ounces to each 100 pounds of meat.

For all ground meat such as hamburger steak, chopped meat, sausage, etc., sprinkle the Special Preservative onto the meat before it is chopped or ground.

For steaks, chops, roasts and various cuts of meat, rub the Special Preservative lightly over the meat.

ZANZIBAR-BRAND SPECIAL PRESERVATIVE IS PUT UP IN

1-pound can,	50-pound keg (bulk),
5-pound can,	100-pound drum (bulk),
30-pound case (6 5-lb. cans),	200-pound barrel (bulk),
60-pound case (12 5-lb. cans),	350-pound barrel (bulk),
120-pound case (24 5-lb. cans),	500-pound barrel (bulk).

For Quotations, See Current Price List

ZANZIBAR-BRAND
(Reg. U. S. Pat. Off.)

GARLIC COMPOUND

(GARLIC AND CEREAL)

Mixes Readily and Distributes Evenly

Does Not Spoil or Deteriorate

FOR BOLOGNA, FRANKFURTS, SALAMI, CORNED BEEF, MEAT LOAVES, SAUCES, AND ALL PRODUCTS WHICH REQUIRE THE ZESTFUL INFLUENCE OF GARLIC.

Many famous sausage makers, chefs and delicatessen manufacturers prefer Zanzibar-Brand Garlic Compound because it is not governed by seasons: it is always at hand and ready to use. It gives their products a delicate, uniform garlic flavor. Its great strength makes it efficient and economical to use. It does away with the trouble and labor of peeling and handling fresh garlic and the worker is always ready to handle other things without danger of tainting them with garlic. The formulas in this book give directions for using it.

Zanzibar-Brand Garlic Compound is a powder made of selected fresh garlic, dried (evaporated), and combined with cereal to retain the essential flavoring principle, in concentrated form, by a special process of our own. Our method holds the delicious flavoring properties of fresh garlic and permits their being easily and thoroughly mingled with the food products that are to be flavored. It complies with the National Pure Food Law.

ZANZIBAR-BRAND GARLIC COMPOUND IS PUT UP IN

1-pound can,
5-pound can,
10-pound can,
25-pound can,
50-pound can,
100-pound can,
250-pound barrel.

Write for Current Price List

ZANZIBAR-BRAND
(Reg. U. S. Pat. Off.)

PURE GARLIC POWDER

Evaporated Fresh Garlic

Without Cereal

Does Not Spoil

Zanzibar-Brand Pure Garlic Powder is a straight garlic seasoning made and composed of nothing but selected garlic. By our special vacuum process, we simply remove most of the moisture from fresh specially selected garlic, thereby increasing its strength manifold.

The resultant concentrated Pure Garlic Powder is a perfect garlic seasoning which retains practically all of the essential oils and flavoring constituents of the fresh garlic without the possibility of spoilage in keeping.

This garlic product, being in a finely powdered form, can be easily and thoroughly distributed throughout the food, thereby producing a delightful, uniform flavor.

Zanzibar-Brand Pure Garlic Powder may be used in curing beef or in seasoning sausage, meat loaf, and other food products, in states and factories where garlic with cereal may not be used. No special labels or markings are needed where this Pure Garlic Powder is used. It is lawful to use in all states.

ZANZIBAR-BRAND PURE GARLIC POWDER IS PUT UP IN

1-pound can,
5-pound can,
10-pound can,
25-pound can,
50-pound can,
100-pound can,
250-pound barrel.

For Quotations, See Current Price List

Make High-Grade Lard and Obtain Top Prices

B. HELLER & CO'S

Lard and Tallow Purifier

For Any Method of Kettle Rendering

With Any Kind of Equipment

B. Heller & Co's Lard and Tallow Purifier neutralizes the free, fatty acids in the lard, making it resist rancidity and giving it greater keeping quality in any weather and in any climate.

On Pages 353 to 358 of this book you will find simple directions for using the Lard and Tallow Purifier both with and without settling tank and agitator, in open cauldron or in steam jacketed kettle. Follow those directions and turn out the cleanest, whitest, finest flavored, wholesome lard it is possible to make. If the directions are followed, there will be no souring and no oil separating out of it. No steam rendered lard can equal it or command as high a price.

Tallow is rendered white, odorless, flaky, and as soft as lard if it is rendered and purified with B. Heller & Co's Lard and Tallow Purifier in the manner described on pages 360-361 of this book.

B. Heller & Co's Lard and Tallow Purifier is an insurance against spoilage and saves its own cost many times over. It contains only such matter as is permitted under United States Pure-Food Laws and is permitted in Government Inspected Packing Houses.

B. HELLER & CO'S LARD AND TALLOW PURIFIER IS PUT UP IN

15-pound trial case (15 1-pound cartons),
¼ case (25 1-pound cartons),
½ case (50 1-pound cartons),
case (100 1-pound cartons),
½ barrel (275 pounds, bulk),
barrel (500 pounds, bulk).

Write for Current Price List

ZANZIBAR-BRAND
(Reg. U. S. Pat. Off.)

CHILE POWDER

A Combination of Chile Pepper, Condiments and Spices

Indispensable in the South and Among Spanish-American Peoples

Zanzibar-Brand Chile Powder gives to spiced meats, sausages, meat loaves, sauces, etc., that rich, intense flavor and color demanded by those exposed to the exhausting effect of a hot sun. It stimulates the appetite, satisfies the craving for a zestful seasoning, and so aids digestion naturally, without the use of drugs and chemicals.

It is the perfect seasoning to rub on Italian ham, spiced ham and spiced beef; gives proper flavor and permissible, natural color to Chile pork sausage, peperoni, calbassa, and the like; gives characteristic seasoning and color to certain meat loaves, tamales, chile-con-carne, chop suey, Hungarian goulash, and to stews, soups, meat, fish, dressings, salads, gravies and sauces. Formulas scattered throughout this book give directions for its proper use. It is permitted everywhere.

ZANZIBAR-BRAND CHILE POWDER IS PUT UP IN

3-pound can,
6-pound can,
10-pound can,
25-pound can,
50-pound can,
100-pound can,
225-pound drum.

For Quotations, See Current Price List

ZANZIBAR-BRAND

(Reg. U. S. Pat. Off.)

CELERY-ZEST

Zanzibar-Brand Celery-Zest is finely pulverized, and therefore mixes readily and uniformly with articles of food in which it is used, giving them a delicious celery flavor *without salt.*

Zanzibar-Brand Celery-Zest has the advantage of being *available for use at all seasons* of the year. It is always ready for use and *does not spoil.* It is unsurpassed for flavoring meat loaves, sausages, and various dishes prepared for delicatessen stores. It imparts a distinctive flavor, appetizing and zestful, which will increase the business of any one using it.

Zanzibar-Brand Celery-Zest contains no salt: therefore does not make articles in which it is used, salty.

ZANZIBAR-BRAND CELERY-ZEST IS PACKED IN

3-pound can,
6-pound can,
10-pound can,
25-pound can,
50-pound can,
100-pound can,
250-pound barrel.

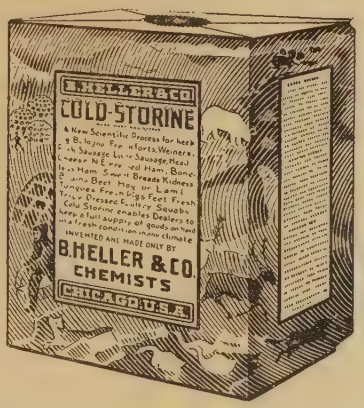
Write for Current Price List

COLD STORINE

(Reg. U. S. Pat. Off.)

Reduces Losses From Spoiled Goods

KEEPS YOUR SAUSAGE, SWEETBREADS, PIG FEET, ETC., IN BETTER CONDITION



Cold-Storine is a dry powder for making a solution in which sausage, poultry, sweetbreads, brains, pig feet, tripe, etc., can be kept by night that they may be more safely displayed by day and present a better appearance.

It is especially valuable for keeping pork sausage and liver sausage as they shrink, lose weight and become slimy more rapidly than other sausages, when not protected over night with Cold-Storine.

The merchandise can be immersed in the solution in the evening, held in the cooler over night, and taken out for display again in the morning. The solution may be used over and over, making it most economical to use. The benefits derived from the use of Cold-Storine are out of all proportion to the low cost. It contains no ingredients that are ruled out under National or State Pure-Food Laws. It is permitted under Federal Meat Inspection.

COLD-STORINE IS PUT UP IN

15-pound trial case (15 1-pound cartons),
¼ case (25 1-pound cartons),
½ case (50 1-pound cartons),
case (100 1-pound cartons),
½ barrel (250 pounds, bulk),
barrel (500 pounds, bulk).

For Quotations, See Current Price List

B. HELLER & CO'S

HAM-ROLL-INE

(Reg. U. S. Pat. Off.)

A Meat Curing Preparation Used in Making Sausage in Bags

Ham-Roll-Ine is a powdered preparation put up expressly for curing ham, shoulder and butt trimmings used in making Jersey ham, Jersey pig specialty, ham roll, and minced ham in canvas bags. It produces a fine mild cure, and gives the meat a beautiful appetizing color and excellent flavor.

Sausage rolls in which Ham-Roll-Ine is used remain much longer in fresh, appetizing condition, when displayed on the counter, thereby greatly increasing the sales.

Ham-Roll-Ine complies with the United States Government Meat Inspection Regulations, and contains no ingredients that are ruled out under Pure-Food Laws.

Directions for using Ham-Roll-Ine are included in the formula on pages 191-192.

B. HELLER & CO'S HAM-ROLL-INE IS PUT UP IN

¼ case (25 1-pound cartons)
½ case (50 1-pound cartons),
case (100 1-pound cartons),
½ barrel (250 pounds, bulk),
barrel (500 pounds, bulk).

Write for Current Price List

ZANZIBAR-BRAND
(Reg. U. S. Pat. Off.)

SAVORY JELL-JELL
(Reg. U. S. Pat. Off.)

Excellent for Binding and Glazing Meats

Makes a Very Firm Jell Combined Meat Flavoring and Gravy Jell

Zanzibar-Brand Savory Jell-Jell is a necessity in binding tongue loaves, press-cooked corned beef, boned ham, etc., to make them slice firmly without falling apart.

As a filler for headcheese, souse, meat loaves, and meat pies, it has no superior.

Glazed preparations, such as brisket of beef, jellied tongue, and glazed pig head, stand out lustrous and firm, even in moist atmosphere, when Savory Jell-Jell is used.

When corned-beef jelly, tongue jelly, and such home-made products turn out thin, Savory Jell-Jell is the thing to jell and stiffen them. It is made of the most powerful stiffening agents known and is pure and wholesome.

The aromatic flavors of Savory Jell-Jell are so perfectly balanced and blended that the delightful taste defies description. It is distinctive and appealing and sells your products.

Simple directions for using Savory Jell-Jell are scattered throughout this book, wherever its use is indicated. It can be used in numerous emergencies: "Made in a Minute" fits it perfectly.

ZANZIBAR-BRAND SAVORY JELL-JELL IS PUT UP IN

5-pound can,
10-pound can,
25-pound can,
50-pound can,
100-pound can.

For Quotations, See Current Price List

ZANZIBAR-BRAND
(Reg. U. S. Pat. Off.)

FLEXINE

A FLEXIBLE COATING FOR CANVAS-BAG SAUSAGE CASINGS

Does Not Crack or Peel:

Yields to Finger Pressure Like Animal Casings

Prevents Drying and Saves Shrinkage

Prevents Slime and Contamination

Economical and Easy to Use

Zanzibar-Brand Flexine enables the sausage maker to substitute cheap linen, muslin or canvas bags for the costlier beef bungs, bladders and other animal casings. It enables him to avoid the cleaning, soaking and storing of animal casings. Cloth bags with Flexine coating appeal to many who will not eat sausage in any other form.

Zanzibar-Brand Flexine should be used on sausage, chopped meat, smoked meat, and other products sold in canvas bags that need protection, such as

Bologna in bags,
Canvas-back bologna,
Minced ham in bags,
Jersey ham,
Ham roll,
Luncheon ham,
Sandwich meat,
Canada "bacon",
Ham protection from skippers,
Bacon protection from skippers.

Zanzibar-Brand Flexine is *the only true protector* of sausage in bags, *because it does not peel or crack off* when the sausage is bent or pressed with the fingers. Yet it is as dry, hard, and *flexible as any animal casing.*

Zanzibar-Brand Flexine enables the sausage maker to print any desired advertising on the casings and turn out a handsome, tempting product of uniform diameter, straight, and of even length. Thus he can standardize his shipping cases and save on transportation charges. The manner of printing the casings, imparting the smoke color, when Flexine Coating is used, and the use of Flexine, are described on pages 155-156 and on each container.

Cloth casings need tying at one end only. They do not break in stuffing or burst in cooking. When coated with Flexine, the product slices neatly and evenly.

ZANZIBAR-BRAND FLEXINE IS PUT UP IN

25-pound box.
50-pound box.
100-pound box.
200-pound box.

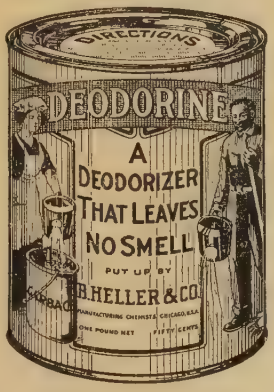
Write for Current Price List

DEODORINE

(Reg. U. S. Pat. Off.)

THE DEODORIZER THAT LEAVES NO SMELL

A harmless deodorizer, for use in places where a deodorizer is desired which does not give off any odor of itself but quickly destroys the odor with which it comes in contact.



Deodorine in water produces a solution that will destroy offensive odors and will NOT leave any odor of itself. Most deodorizers have an odor of their own, which in many instances is as offensive as the odor they are expected to remove.

Deodorine can be used to remove quickly the offensive odors which form in urinals, toilets, cuspidors, etc.

Deodorine Solution will not injure metal or porcelain ware; neither will it injure or irritate the hands or other portions of the skin with which it comes in contact.

Deodorine is very cheap to use. *One teaspoonful makes two gallons of Deodorizing Solution,* suitable for sprinkling floors, washing out ice boxes, fish boxes, flushing urinals, etc. It is so cheap that it can be freely used. After a trial no butcher or fish dealer will do without it.

B. HELLER & CO'S DEODORINE IS PUT UP IN

Case of 1 dozen 9-ounce cans,
Case of 1 dozen 1-pound cans.

For Quotations, See Current Price List

B. HELLER & CO'S

ASEPTIFUME

(Reg. U. S. Pat. Off.)

A Reliable Fumigant

Aseptifume is used for purifying the air and destroying obnoxious odors in hide rooms, rendering rooms, slaughter houses and many other places.

It can be used in refrigerators, fruit and vegetable cellars, etc., by first removing all food products and then burning Aseptifume in them.

This method of using Aseptifume will put food-storage places in a better and more wholesome condition. Bad odors can be completely eradicated from any room by burning Aseptifume in the room, just as in the refrigerator.

Full Directions on every package.

B. HELLER & CO'S ASEPTIFUME IS PUT UP IN

5-pound can,
25-pound pail,
50-pound pail,
100-pound keg,
200-pound half barrel,
500-pound barrel.

HELLER'S

SANITARY FLUID

A Liquid Disinfectant, Germicide and Purifier

A Necessity Around Markets and Packing Houses

Heller's Sanitary Fluid regularly used will keep places in a sanitary and healthful condition.

It is a liquid that can be sprayed lightly over the floors, etc., or it may be used in the scrubbing water. It is recommended for use in cuspidors, urinals, closets, refuse and garbage cans. It is very economical to use because of its strength.

Each gallon, with added water, makes 20 gallons of effective disinfectant.

Complete directions on each container.

HELLER'S SANITARY FLUID IS PUT UP IN

Case of 12 1-pint cans,
Case of 12 1-quart cans,
Case of 12 1-gallon cans,
30-gallon steel drum,
55-gallon steel drum.

Write for Current Price List

B. HELLER & CO'S

TRADE MARK **OZO** REGISTERED

WASHING POWDER

Cleanses Wood, Cement, Tile, Paint and Metal

Takes the Drudgery Out of Clean-Up Time

Ozo Washing Powder saves time and labor in cleansing, scrubbing, washing and purifying. It is especially recommended for use in packing houses, meat markets, delicatessen and fish stores, slaughter houses, sausage kitchens, smoke houses, and coolers.

Floors and racks for dry-salt curing must be scrupulously clean. Tierces, barrels and vats for the pickle cure and containers for the box cure must be scrubbed after each use to avoid ropy brine and souring in cure.

Modern ideas of correct sanitation demand clean surroundings where food products are handled. Unclean floors, walls, trucks and receptacles for trimmings draw flies and cause sour meat and sausage. Slimy sausage and slimy meats should be prevented by cleanliness. Floors, store fixtures, delivery trucks and baskets are under continuous observation and the public is justified in judging the wholesomeness of your meats by the visible evidence of your cleanliness.

Ozo Washing Powder makes it easy to clean greasy surfaces and to clean out the accumulations in cracks and crevices which cause bad odors and attract vermin of all kinds. The regular use of Ozo Washing Powder in scrubbing and cleaning checks losses and draws trade.

B. HELLER & CO'S OZO WASHING POWDER IS PUT UP IN
½ case (1½ dozen 2½-pound packages),
case (3 dozen 2½-pound packages),
barrel (280 pounds, bulk).

For Quotations, See Current Price List

TRU-WHITE WASHING POWDER

(Reg. U. S. Pat. Off.)

Formerly Called "White Swan"

Cleanses and Purifies Without Suds

Cuts Greases

Equally Effective in Hard Water and in Soft

Tru-White Washing Powder is both an active, thorough cleanser and a purifier, to the last particle in the container. It should be used freely as a sanitary precaution where meat or fish is kept or prepared as food. Butchers and packers will find Tru-White Washing Powder efficient and economical.

Floors, counters, woodwork, ice boxes, show cases and windows are quickly washed with it leaving them bright, sweet and clean.

The heavy greases on the equipment, tools and utensils of the cutting room, sausage kitchen and meat market, are quickly removed with Tru-White Washing Powder. It rinses clean and leaves no smeary film on choppers, pans and utensils cleaned with it as ordinary washing powders do.

Save the hands and metals by using Tru-White Washing Powder.

TRUE-WHITE WASHING POWDER IS PUT UP IN

50-pound drum,
100-pound drum,
280-pound barrel.

Write for Current Price List

B. HELLER & CO'S

HOG-SCALD

(Reg. U. S. Pat. Off.)

A Hog Hair Loosener and Cleaner

Remove Scurf and Clean the Pores

Lessen the Losses from Souring

B. Heller & Co's Hog-Scald is a powder used in the scalding water for scalding and cleaning hogs. It causes the hair to come off easily, without leaving a stubble to disfigure hams and bacon. The hair yields quickly to the scraper when Hog-Scald is used. It prevents such souring of the carcass as is due to remaining in the scalding water too long to loosen the hair.

Hog-Scald makes both the scalding and the scraping easier and pays for itself through the time and labor saved.

Hog-Scald is a dependable cleansing agent that will make it easy to remove the germ-laden filth and scurf from the skin of the hog, making the hams and bacon cleaner, brighter, and more appetizing. If that filth is left in the pores it will affect the flavor of the brine the meat is cured in and will affect the flavor of the lard when the rind gets into the rendering tank or kettle. The scraper cleans out the pores when Hog-Scald is used.

Hog-Scald is useful too in removing the mucus, scurf and fuzz from tripe while scrubbing it.

Directions for use on each can.

B. HELLER & CO'S HOG-SCALD IS PUT UP IN

10-pound can,
½ case (½ dozen 10-pound cans),
case (1 dozen 10-pound cans).

For Quotations, See Current Price List

B. HELLER & CO'S

TANALINE

(Trade Mark Registered)

A Tanning Powder for All Kinds of Skins and Pelts

For Soft and Pliable Furs, Rugs, Robes, Cloaks and Overcoats

Tanaline is a preparation for tanning, with little work, the skins of all kinds of animals. It is especially convenient for the man who desires to tan a few skins at a time and wants a preparation that will do the work perfectly. It is so simple to use that anyone can do expert work with Tanaline and make very beautiful, soft pliable, sweet smelling, valuable furs and rugs.

Each package of Tanaline contains enough for thoroughly tanning 50 lbs. of skins. Aside from being able to do perfect tanning with Tanaline, a splendid income can be made from tanning small skins that are often easily obtainable. Tanaline will give perfect satisfaction and bring good profits.

The simple method is described on page 367-368 and more fully on each carton.

B. HELLER & CO'S TANALINE IS PUT UP IN

1/12 case (1 dozen 3-pound cartons),
¼ case (3 dozen 3-pound cartons),
½ case (6 dozen 3-pound cartons),
case (1 gross 3-pound cartons).

Write for Current Price List

B. HELLER & CO'S

BUTCHER and PACKER THERMOMETER

Specially Designed for Proper Control of Temperature in the Activities of the Meat Business

Particularly and Specifically for

Cooling, *Curing,* *Ham cooking,* *Sausage cooking,* *Sausage dry room,* *Hog scalding,* *Rendering.*

This useful and practical thermometer has an accurately calibrated scale of degrees in large plain figures, easy to read. The critical degrees stand out from the others in Bold Red so that even the unskilled laborer can confidently use it. It is well protected from injury and measures about 18 inches over all.

A card accompanies each thermometer giving the same information in greater detail and instructing those who are not accustomed to the use of a thermometer. Tack this on the wall near the thermometer. Complete information on temperatures is given in the text of this book, under the heading governing each operation in the meat business.

While the meat market may get along with two thermometers, one in use and one in reserve for emergencies, packers and sausage makers will find it convenient to have one in each department.

This thermometer is registered in the U. S. Patent Office and the guide is protected by copyright. All infringements will be prosecuted.

B. HELLER & CO'S BUTCHER AND PACKER THERMOMETER IS PACKED

1 only, in box,
¼ dozen, in box,
½ dozen, in box,
1 dozen, in box.

For Quotations, See Current Price List

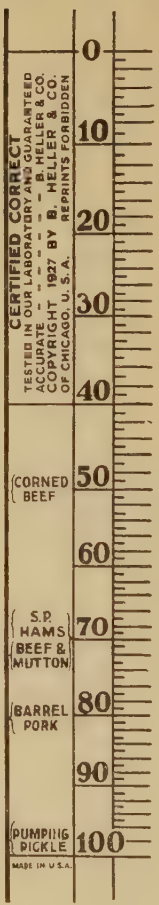
B. HELLER & CO'S

SALIMETER

A Hydrometer for Testing Brine Strength

The Salimeter (or salt meter) is used in testing and determining the strength of curing pickle for meats, cucumbers, etc., for testing pumping pickle used to pump hams, shoulders, tongues, and other meats; for testing the strength of brine used for cooling, keeping and shipping certain kinds of sausage, and for gauging the strength of brine used as a refrigerant.

A scale in the stem accurately indicates the degrees from 0 to 100. Beside these is a guide indicating the proper degree for the principal cures and for pumping pickle. This is a special registered feature of B. Heller & Co's Salimeter. The glass tube is weighted to float in an upright position. The depth to which it sinks indicates, on the gauge, the strength of the brine or pickle. Full explanation and use of the Salimeter on pages 47 to 49. Proper strength of brine for each operation is given in the text of the book under the heading governing that operation.



Each B. Heller & Co. Salimeter is carefully tested for accuracy in our laboratory, before shipping, and is certified correct.

B. HELLER & CO'S SALIMETER IS PACKED

¼ dozen, in box,
½ dozen, in box,
1 dozen, in box.

Write for Current Price List

MALABOZA GUM

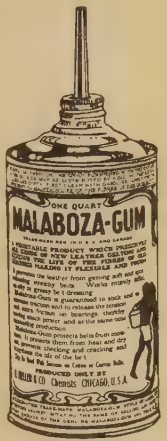
A BELT DRESSING

A Vegetable Product: Not Oily or Greasy

Renews and Preserves Life of Belt

Prevents Dry Rot, Cracking, Sponginess and Stretching

Increases Traction and Saves Power



Malaboza Gum is used on leather beltings. It protects the leather belts from moisture, heat and dry rot and prevents them from cracking and checking, thereby lengthening the life of the belts. It renews the life of the fibre of old leather belting making it flexible and tough. It is *entirely different* from the ordinary oily or greasy belt dressing. It prevents the leather of the belting from becoming soft and spongy, and because of that fact it eliminates stretchy belts.

Malaboza Gum adheres tenaciously and therefore *prevents the belts from slipping.* Traction is thus increased, and belts can be run looser with the same efficiency, thereby relieving the tension and saving power by lessening the friction on the bearings.

It is very simple to use Malaboza Gum. Directions are given upon every can. *It may also be used with success on cotton or canvas belts.*

MALABOZA GUM IS PUT UP IN

Box of 6 1-quart cans,
Box of 1 dozen 1-quart cans.

For Quotations, See Current Price List

$1,000.00 GUARANTEED

(Reg. U. S. Pat. Off.)

ENAMEL CLEANER

For Porcelain and Enamel

Removes Stains

Restores Luster to Dulled, Deadened Surfaces

Good for Use on the Hands

Enameled or porcelain sinks, tubs, meat pans, scales, porcelain ice boxes and refrigerators, glazed tiling, wash bowls, urinals, etc., are made unsightly and even ruined by repeated cleaning with unsuited substances. *$1,000.00 Guaranteed Enamel Cleaner* not only *cleans them like magic* but *preserves the lustrous finish and often restores it if* unsuited preparations have not completely removed the enamel.

Burnt stains, mineral stains, from iron or sulphur in the water, dark rings, and dirty bluish discoloration are quickly removed with $1,000.00 Guaranteed Enamel Cleaner.

It contains nothing injurious and can be used freely as *an excellent cleaner and whitener of the hands.* Full directions on each container.

$1000.00 GUARANTEED ENAMEL CLEANER IS PUT UP IN

Case of 1 dozen 1-pound cans, 10-pound can, ½ case (6 10-pound cans), Case (1 dozen 10-pound cans), ½ barrel (250 pounds, bulk), Barrel (500 pounds, bulk).

Write for Current Price List

TRADE MARK **O Z O** REGISTERED

Waste Pipe Opener

Opens Stopped-Up Drains and Plumbing

Dissolves Scale Due to Hard Water

Ozo Waste Pipe Opener *dissolves scale and grease* **in stopped-up sinks, ice box pipes, sewers, water closets, etc. Its use** *will open a drain pipe in a few minutes.*

In districts where the water is hard or places where the pipes clog easily, all the *pipes should be flushed regularly* **once a month with Ozo Waste Pipe Opener.**

It will not affect any of the metals or enamel ware **used in plumbing and will save much annoyance, expense and trouble.**

OZO WASTE-PIPE OPENER IS PUT UP IN

Case of 1 dozen 20-ounce cans,
10-pound can,
½ case (6 10-pound cans),
case (1 dozen 10-pound cans).

For Quotations, See Current Price List

$1000.00 GUARANTEED
(Reg. U. S. Pat. Off.)

Furniture Polish

$1000.00 Guaranteed Furniture Polish is different from other so-called polishes or finishes. It not only *produces a brilliant, lasting high-gloss finish,* that makes old counters and woodwork look like new, but *removes spots and stains.* It is a clear, transparent liquid that requires no shaking because it contains no sediment, acid or alcohol.

$1000.00 Guaranteed Furniture Polish revives the original brilliant lustre of the varnish **on store fixtures and woodwork. It acts as a preservative of the varnish and brings out the beautiful grain of the wood.**

FINE FOR AUTOS

It is a wonderful cleanser for automobiles, making them look like new because it removes street oils, tar, and soiling.

DIRECTIONS

Pour a small quantity of $1000.00 Guaranteed Furniture Polish into a dish, then dip a soft cotton, cheese-cloth or woolen cloth into it. Apply freely to the surface to be cleaned and polished. A dry soft cotton or cheese-cloth should then be used to wipe the polish off. Then with another clean soft cloth, rub the surface a few times briskly with the grain of the wood. When it is perfectly dry it will be clean and beautifully polished.

$1000.00 GUARANTEED FURNITURE POLISH IS PUT UP IN

1 gallon can,
½ case of 6 1-gallon cans,
Case of 1 dozen 1-gallon cans,
Case of 1 dozen 1-pint cans,
Case of 3 dozen ½-pint cans.

Write for Current Price List

B. HELLER & CO'S

Royal Marble Cleaner

(Trade Mark Registered)

A Powdered Preparation for Cleaning and Renewing the Appearance of Marble, Mosaic and Polished Stone

No Grit or Scratch

The butcher or dealer whose counters are fitted with costly marble tops or other polished stone, or whose floors are inlaid with beautiful patterns of mosaic, need not be tempted with modern substitutes, provided he keeps them lustrous, clean and immaculate. *The truly elegant does not go out of date.* But they must be kept at their best: brilliant and stainless.

B. Heller & Co's Royal Marble Cleaner quickly and easily removes soiling and stains, no matter of how long standing. It *completely removes the stains of mineral-bearing water*, such as iron and sulphur. It *restores the original polish* and flash if the surface is not worn rough. Directions on the container.

B. HELLER & CO'S ROYAL MARBLE CLEANER IS PUT UP IN

Case of 3 dozen 1-pound cans,
½ case of 6 10-pound cans,
Case of 1 dozen 10-pound cans,
½ barrel, 250 pounds,
Barrel, 500 pounds.

$1000.00 GUARANTEED

(Reg. U. S. Pat. Off.)

GOLDEN GLOSS SHINE

A Liquid Polish for Nickel, Aluminum, Brass, Copper, Steel, Glass, Etc.

HOT OR COLD

Makes Metal Polishing Easy

$1000.00 Guaranteed Golden-Gloss-Shine Metal Polish is *Guaranteed to Give Satisfaction or Money Refunded.* Works equally well on hot or cold metal.

Engineers say *"It can't be beat."* In the market, *"On and off, it looks like new."* Chauffeurs and Mechanics save work and time. It covers large surfaces quickly, takes off dirt, grease and old tarnish with little or no effort.

Leave it on all night if you want to. It rubs off easily and does not injure the hands.

The shine is brilliant.

$1000.00 GUARANTEED GOLDEN-GLOSS-SHINE METAL POLISH IS PUT UP IN

Case of 1 dozen 1-pint cans,
Case of 1 dozen 1-quart cans,
Case of 1 dozen ½-gallon cans,
Case of 1 dozen 1-gallon cans.

For Quotations, See Current Price List

$1000.00 GUARANTEED

(Reg. U. S. Pat. Off.)

SILVER POLISH

For Markets, Restaurants, Hotels and Institutions

Effective on Metal Trimmings and Plated Ware—The Perfect Powder for Precious Metals

$1000.00 Guaranteed Silver Polish gives gold, silver, plated ware, nickel, cut glass, etc., upon which it is used, a bright, mirror-like finish that is most pleasing. It contains no oil, grit or acids to injure the hands or the finest of precious metals. It is of imperceptible fineness and soft as velvet. Without exception *the finest polish of its kind made.*

For polishing the metal trimmings on show cases, refrigerators, ice boxes, etc., $1000.00 Guaranteed Silver Polish is especially useful. It does its work quickly, easily and without scratching.

$1000.00 Guaranteed Silver Polish is guaranteed to please

$1000.00 GUARANTEED SILVER POLISH IS PUT UP IN
Case of 1 dozen 6-ounce cans

B. HELLER & CO'S

Royal Metal Polish

(Trade Mark Registered)

A Polishing Powder for Brass, Copper, German Silver, Zinc, Tin, etc.

Creates a Brilliant, Lasting Lustre, Like New

Royal Metal Polish is economical to use, and quickly removes soiling and tarnish without scratching. When moistened with vinegar, it *restores the original brilliancy of copper and brass that have been exposed to the corroding influence of the weather for a long time.* It is especially suitable for Hotels, Restaurants and Institutions where large areas of polished surface must be brightened regularly without loss of time or effort. Directions on each container.

B. HELLER & CO'S ROYAL METAL POLISH IS PUT UP IN

Case of 3 dozen 1-pound cans,
½ case of 6 10-pound cans,
Case of 1 dozen 10-pound cans,
Half barrel, 250 pounds,
Barrel, 500 pounds.

Write for Current Price List

$1000.00 GUARANTEED
(Reg. U. S. Pat. Off.)

ROACH KILLER

For Cockroaches, Water Bugs, Croton Bugs, Black Beetles or Bread Eaters

Effective and Simple to Use

Nothing would cause a market to lose trade more quickly than having a customer notice the presence of roaches. The very thought of associating these vile pests with the food we eat, is repulsive.

$1,000.00 Guaranteed Roach Killer kills cockroaches and water bugs **wherever it is used according to directions. It is made of perfectly clean materials and has no odor.**

It is a preparation that cockroaches and water bugs like to eat. It poisons them. Then they go to their nests where they die. The dead bodies are often eaten by the other cockroaches or water bugs, in the nests or in their haunts, and this results in killing them off. They actually kill themselves without work on the part of any one, after the powder has been carefully distributed.

$1000.00 Guaranteed Roach Killer is entirely different from other products. *It kills them in the walls and under the floors where other preparations cannot be made to reach them.* It does its work so surely and effectively, that we offer a $1000.00 guaranty, which appears plainly printed on the label of each package.

Directions for use are given on page 380 and, more fully, in the folder packed with the Roach Killer.

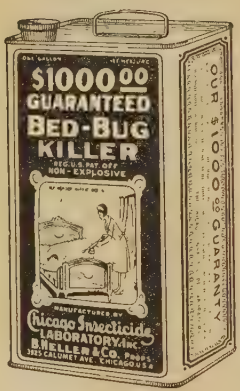
$1000.00 GUARANTEED ROACH KILLER IS PUT UP IN

½ case of 6 1-pound cans,
Case of 1 dozen 1-pound cans,
Case of 1 dozen 7-ounce cans,
Case of 3 dozen 7-ounce cans.

For Quotations, See Current Price List

$1000.00 GUARANTEED
(Reg. U. S. Pat. Off.)

Liquid Bedbug Killer



A Highly Efficient Contact Spray

FOR BEDBUGS AND CLOTHES MOTHS

$1000.00 Guaranteed Liquid Bedbug Killer is guaranteed to kill Bedbugs. **When thoroughly applied it is sure to kill them. This liquid Bedbug Killer can be sprayed freely into all cracks and crevices. It does not injure fine fabrics, wall paper, etc. When sprayed freely into all cracks, into the corners of beds, dresser drawers, etc., and into the seams and tufts of mattresses where bugs hide, it does its work thoroughly.**

Liquid Bedbug Killer gives the best of satisfaction and does exactly what is claimed for it. One trial will prove how thoroughly it works.

To make the application of Liquid Bedbug Killer thorough and economical, an inexpensive special atomizer has been designed with which a penetrating, fine spray-like mist can be directed into corners, cracks and crevices. It is illustrated on page 437.

Full directions for the use of the Liquid Bedbug Killer are given on a folder packed with each container.

$1000.00 GUARANTEED LIQUID BEDBUG KILLER IS PUT UP IN

Case of 1 dozen 1-pint cans,
Case of 1 dozen 1-quart cans,
½ case of 6 ½-gallon cans,
Case of 1 dozen ½-gallon cans,
½ case of 6 1-gallon cans,
Case of 1 dozen 1-gallon cans,
30-gallon steel drum,
55-gallon steel drum.

Write for Current Price List

$1000.00 GUARANTEED

(Reg. U. S. Pat. Off.)

ANT-BANE

A DEPENDABLE REMEDY FOR HOUSE ANTS, LITTLE RED ANTS, LITTLE BLACK ANTS, ARGENTINE ANTS, AND THE LIKE

Can Be Used Dry or Made Into Liquid Ant-Bane

Of all the troublesome insect pests, ants are the most difficult to get rid of unless $1000.00 Guaranteed Ant-Bane is used. If not promptly controlled, they penetrate every part of the market, packing plant and home, even invading garden and orchard.

They feed on meat, blood, lard, cream, and dead insects, as well as on bakery and confectionery goods, sugar, syrup and fruit juice.

$1000.00 Guaranteed Ant-Bane is a safeguard against loss of property and loss of trade. **Directions for its use are given on each can, and in more detailed form on a folder packed with each can.**

$1000.00 GUARANTEED ANT-BANE IS PUT UP IN

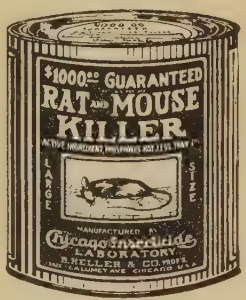
Case of 1 dozen 1-pound cans,
Case of 3 dozen 7-ounce cans.

For Quotations, See Current Price List

$1000.00 GUARANTEED

(Reg. U. S. Pat. Off.)

Rat *and* Mouse Killer



The Quickest, Cheapest and Most Effective Method of Riddance

PROTECTS THE MEATS AND PROMOTES SANITATION

Meat markets, packing and slaughter houses, sausage kitchens, and other food establishments are the special prey of destructive rodents. All kinds of meat, fresh, cured, smoked or cooked, as well as butter, lard, game, fish, young poultry, eggs, and flour, are more or less exposed to tempt them.

Even if the building itself is considered rat-and-mouse proof, the platforms, barns and frame houses of the vicinity offer shelter and nesting places from which they sally, watching opportunities to slip into open doors and windows. Once in, they find safe nooks anywhere.

$1000.00 Guaranteed Rat-and-Mouse Killer wipes out entire colonies. **It is safe and sure when the directions are followed. It can be used in government inspected houses, but not in rooms with exposed foodstuffs. In that case, the poison must be used in the other rooms and in the yard and approaches. The manner of using is described on pages 377 to 379 and more fully on folder accompanying each can.**

$1000.00 GUARANTEED RAT-AND-MOUSE KILLER IS PUT UP IN

Case of 3-dozen 4-ounce cans,
Case of 1 dozen 9-ounce cans,
Case of 1 dozen 18-ounce cans.

Write for Current Price List

$1000.00 GUARANTEED
(Reg. U. S. Pat. Off.)

FLY KILLER

Kills House Flies, Mosquitoes, Stable Flies, Blow Flies, Skipper Flies, and Gnats.

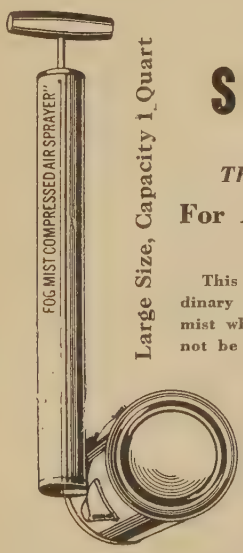
Harmless to Humans and Animals
Has Pleasant Odor and Does Not Stain

Every butcher knows his customers appreciate a market free of buzzing, filthy flies hovering over the meats and spreading disease. Thirty distinct diseases are now known to be spread by flies. Blow flies or bottle flies lay their eggs on moist meat and, in twenty-four hours, it can be covered with maggots. Skipper flies deposit their eggs on cured meat and, in twenty-three hours, the skippers can hatch out to begin their work of destruction.

The use of $1000.00 Guaranteed Fly Killer saves losses from such insects and prevents the loss of disgusted customers. It is *the only fly killer that is backed up with a $1000.00 Guaranty.* The method of using it is described on pages 373 to 375 and, in greater detail, in a folder packed with each can.

$1000.00 Guaranteed Fly Killer is *excellent as a window cleaner.* Simply spray the windows lightly, wipe and polish with a dry cloth. Use no water. The windows will be clean and sparkling and remain so longer than when cleaned with water.

$1000.00 GUARANTEED FLY KILLER IS PUT UP IN GALLON, HALF GALLON AND QUART CANS.



Large Size, Capacity 1 Quart

$1000.00 GUARANTEED
(Reg. U. S. Pat. Off.)

SPECIAL ATOMIZER

A Compressed-Air Sprayer
Thoroughly Well Made, Simple and Effective

For Applying Insecticides and Disinfectants And Spraying Plants and Flowers

This atomizer is well constructed and durable, and with ordinary care will last for years. It throws a fine, spray-like mist which penetrates into corners, cracks and crevices that cannot be reached by ordinary means.

Especially useful for applying $1000.00 Guaranteed Fly Killer, $1000.00 Guaranteed Liquid Bedbug Killer, Heller's Sanitary Fluid, and anything requiring the use of a powerful hand sprayer.

Prevents waste and saves time and money. Only a few minutes are required to spray a room thoroughly if this atomizer is used. Butchers, Packers and others who have use for a device of this kind, will find it gives very satisfactory results.

$1000.00 GUARANTEED SPECIAL ATOMIZER IS PACKED IN THREE SIZES

For Quotations, See Current Price List

ZANZIBAR-BRAND

(Reg. U. S. Pat. Off.)

BLUE-BLACK WRITING FLUID

For Steel Pens and Fountain Pens

Flows Freely from Any Style of Pen

Dries and Blots Readily and Does Not Smear

Zanzibar-Brand Blue-Black Writing Fluid flows freely and easily from the pen, does not bead or drop, takes onto the paper readily and dries quickly. It produces a rich, deep blue-black color, making a permanent, readable, lasting record. It does not smear or smudge from handling, nor fade out from exposure. It *does not clog* the most delicate mechanism of complicated fountain pens. *No shaking of the pen to start the flow.*

This Writing Fluid is a neutral ink, not acid, and therefore, *does not corrode pens.* Before filling ink wells and fountain pens with it that have contained acid ink, wash them out thoroughly.

When the ink dries in the well by evaporation, refill with water and it will still be an intensely blue-black ink, suitable for every purpose. This may be repeated several times before more ink need be added, thus lowering the expenditure for ink accordingly. The highly concentrated coloring matter in Zanzibar-Brand Writing Fluid makes it the most economical of all inks.

ZANZIBAR-BRAND WRITING FLUID IS PUT UP IN

Case of 6 1-quart bottles,
Case of 1 dozen 1-quart bottles,
Case of 3 dozen 1-quart bottles,
Case of 6 dozen 1-quart bottles,
Case of 1 gross 1-quart bottles,
5-gallon keg,
10-gallon keg,
½ barrel (25 gallons),
barrel (50 gallons).

Write for Current Price List